CHAPTER 2

KC-130J Crew Chief
(INTERIM APPROVAL 21 SEP 04)

CHAPTER 2

KC-130J Crew Chief

200. MARINE AERIAL REFUELING SQUADRON (KC-130J) UNIT CORE COMPETENCY

UNIT TEMPLATE

NOTE

The capabilities defined and described in the core capability and unit template sections are provided to ensure each like squadron maintains a common base of training and depth of capabilities. When resources permit, and when in the judgment of the commander additional training would significantly increase the unit's war fighting capability, training to a level above these base capabilities is permitted. It is incumbent upon, and expected of, the commander to balance any increase in the depth of core capabilities against the overall health and readiness of his unit while staying within his resource constraints.

1. VMGR Mission. Support the MAGTF Commander by providing aerial refueling and assault support, day or night under all weather conditions during expeditionary, joint, or combined operations.

2. Mission Essential Task List (METL)

a. (UJTL TA 1.1.1) Conduct Tactical Airlift
- Conduct assault support transport.

b. (UJTL TA 1.1.4) Conduct Sea and Air Deployment Operations
- Maintain the capability to deploy and operate from advanced bases, expeditionary airfields and forward operating bases.
- Perform organizational maintenance on assigned aircraft.

c. (UJTL TA 1.2.2) Conduct Airborne Operations
- Provide air delivered assault support transport of combat troops, equipment and supplies.
- Provide support for casualty evacuation operations.
- Maintain self-defense capability from ground-to-air and air-to-air threats.

d. (UJTL TA 4.2) Distribute Supplies and Provide Transport Services
- Conduct aerial re-supply.
- Provide support for mobile Forward Arming and Refueling Points (FARPS).
- Provide support for Rapid Ground Refueling (RGR) of aircraft and vehicles.

e. (UJTL TA 4.2.3) Conduct Air Refueling
- Provide Tactical and Long Range Aerial Refueling.

f. (UJTL TA 5) Exercise Command and Control
- Provide Airborne Platform for the Airborne DASC Command Post.

g. (UJTL TA 6.2) Conduct Joint Personnel Recovery
- Conduct Tactical Recovery of Aircraft and Personnel (TRAP) operations.
- Augment local Search and Rescue (SAR) assets

h. (UJTL TA 6.4) Conduct Noncombatant Evacuation
- Provide support for evacuation operations.

3. Table of Organization. Refer to table of organization 8820X managed by total force structure, MCCDC, for current authorized T/O.

Squadron

12 Aircraft
42 Pilots [18 TPC/24 CP (T2P or T3P)]
36 Crew Chiefs
36 Loadmasters

6 Aircraft Detachment

24 Pilots [10 TPC/14 CP (T2P or T3P)]
20 Crew Chiefs
21 Loadmasters

3 Aircraft Detachment

12 Pilots [5 TPC/7 CP (T2P or T3P)]
8 Crew Chiefs
8 Loadmasters

4. Core Capability. A core capable squadron is able to sustain 9 sorties on a daily basis during contingency/combat operations. The above sortie rates are based on 3.0 hour average sortie duration and assumes $\geq$ 70 percent FMC aircraft and $\geq$ 90 percent T/O aircrew on hand. If unit FMC aircraft < 70 percent or T/O aircrew < 90 percent, core capability will be degraded by a like percentage. A core capable squadron is able to accomplish all tasks designated in the unit METL from a main or expeditionary base.

5. METL/Core Skill Matrix. KC-130J core skills directly support the METL as follows:

6. KC-130J Core Model Minimum Requirements (CMMR). Squadron core competency reflects the minimum level of competency a squadron must achieve to perform its core capability. Squadron core competency is measured in terms of minimum Core Skill Proficiency (CSP) crews and minimum numbers of flight leaders per paragraphs a. and b. below:

	KC-130J CORE SKILL											CORE PLUS
METL	AR	TACNAV	FORM	RGR	LRNAV	THRX (I)	THRX (R)	ALZ	NS (H)	NS (L)	AD	DEFTAC
A. Conduct Tactical Airlift		X	X		X	X	X	X	X	X		X
B. Conduct Sea and Air Deployment Operations			X		X	X	X	X	X	X	X	X
C. Conduct In-flight Operations		X	X		X	X	X		X	X	X	X
D. Distribute Supplies and Provide Transport Services		X		X	X	X	X	X	X	X	X	X
E. Conduct Air Refueling	X	X	X		X	X	X		X	X		X
F. Exercise Command and Control					X	X	X		X	X		X
G. Conduct Joint Personnel Recovery	X	X	X	X	X	X	X	X	X	X		X
H. Conduct Noncombatant Evacuation	X	X	X	X	X	X	X	X				X

a. Minimum Unit CSP Requirements. As a minimum, in order to be considered Core Competent, a unit must possess the following numbers of crews who are proficient in each core skill (Unit CSP). In order to be considered proficient in a core skill (individual CSP), a crewmember must attain and maintain proficiency in core skill events, as delineated in paragraphs (1) and (2) below.

* NOTE: DEFTAC is a core plus skill. Proficiency in DEFTAC is not required to obtain unit CSP and will not contribute to unit T-level readiness. Below are KC-130 community recommended unit/individual CSP standards for DEFTAC.

	KC-130J Unit CSP Requirements 12 Plane Squadron				
CORE SKILL *CORE PLUS	Pilots	**ACS	Crew Chiefs	Loadmasters	Crews
CPL			18	18	18
AR	18	9	9	9	9
TACNAV	18	9	9	9	9
FORM	16		9	8	8
LRNAV	24		12	12	12
THRX (I)	28		14	14	14
THRX (R)	8	4	4	4	4
ALZ	12		6	6	6
RGR	12		***18		6
NS(H)	28		14	14	14
*AD	8	4	4	8	4
*NS(L)	12		6	6	6
*DEFTAC	6		2	2	2

	KC-130J Unit CSP Requirements 6 Plane Detachment				
CORE SKILL *CORE PLUS	Pilots	**ACS	Crew Chiefs/	Loadmasters	Crews
CPL			9	9	9
AR	10	5	5	5	5
TACNAV	10	5	5	5	5
FORM	8		4	4	4
LRNAV	12		6	6	6
THRX (I)	14		7	7	7
THRX (R)	4	2	2	2	2
ALZ	6		3	3	3
RGR	6		***9		3
NS(H)	14		7	7	7
*AD	4	2	2	4	2
*NS(L)	6		3	3	3
*DEFTAC	2		1	1	1

	KC-130J Unit CSP Requirements 3 Plane Detachment				
CORE SKILL *CORE PLUS	Pilots	**ACS	Crew Chiefs/	Loadmasters	Crews
			5	5	5
AR	6	3	3	3	3
TACNAV	6	3	3	3	3
FORM	4		2	2	2
LRNAV	6		3	3	3

THRX (I)	8		4	4	4
THRX (R)	2	1	1	1	1
ALZ	4		2	2	2
RGR	4		***6		2
NS(H)	8		4	4	4
*AD	2	1	1	2	1
*NS(L)	4		2	2	2
*DEFTAC	2		1	1	1

** Note: The ACS is occupied by a Pilot.

*** Note: Three RGR qualified Crewmembers are required per crew, at least one of which shall be a Loadmaster

(1) Events Required to Attain Individual CSP. To initially attain CSP, a crewmember must successfully complete all of the T&R events listed in the chart below for that core skill:

KC-130J crew Chief	NS (H)	NS (L)	CPL	LRNAV	TACNAV	THRX	AR	ALZ	RGR	AD	DEFTAC
T&R event requirements to attain competency	203* 204* 224* 225	324*	205*	213	223* 224* 225 323* 324	240* 340*	250* 251* (650) (651)	260* 261* 263	270* 271* 370 371*	380*	440* 441*

Notes:
1. Some events are duplicated in more than one category but not in the overall total.
2. "*" Denotes a Refresher Crew Chief or someone who needs to regain qualification(s).

(2) Events Required to Maintain Individual CSP. To maintain CSP, a crewmember must maintain proficiency in all of the T&R events listed in the chart below for that core skill.

KC-130J Crew Chief	NS (H)	NS (L)	CPL	LRNAV	TACNAV	THRX	AR	ALZ	RGR	AD	DEFTAC
T&R event requirements to maintain competency	203 204 224	324	205	213	223 224 324	240 340	250 251 (650) (651)	263	271 371	380	441

5. QUALIFICATIONS AND DESIGNATIONS

a. Qualification. A qualification is a status assigned to personnel based on demonstration of proficiency in a specific skill. Specific criteria to achieve qualifications shall be delineated in individual T&R chapters. Upon successful completion of qualification criteria, Commanding Officers may

issue an appropriate qualification letter for inclusion in the NATOPS jacket and APR/MPR. Aircrew do not lose a qualification as a function of re-fly factor for individual events. Loss of proficiency (delinquent re-fly factor) for all associated qualification core skill events constitutes loss of that qualification. Re-qualification requires demonstration of proficiency. Specific re-qualification criteria shall be delineated in individual T&R chapters.

b. Designation. A designation is a status assigned to an individual based on leadership ability. A designation is a command specific, one-time occurrence and remains in effect until removed for cause. Specific designation requirements shall be delineated in individual T&R chapters. Commanders shall issue a designation letter to the individual upon the occasion of original designation, with appropriate copies for inclusion in the NATOPS jacket and APR/MPR.

c. Qualifications And Designations Table. These tables serve to delineate the events required for initial and re-qualification of all qualifications and designations. All phase lectures, briefs, squadron training and prerequisites must be complete prior to completing final events. Qualification and designation letters signed by the Commanding Officer should be placed in the NATOPS and APR jackets. Loss of proficiency for all associated core skill events (200-300 level) causes the associated qualification to be lost. Regaining the qualification requires a demonstration of proficiency through the “R” coded syllabus. The Commanding Officer may tailor a syllabus based on the experience of the individual Crew Chief.

Qualification (TRACKING CODE)	Initial Event Qualification Requirements All qualifications require a letter signed by the Commanding Officer to be placed in the NATOPS and APR. Requalification: A Crew Chief fly the associated qualification “R” coded events. Modification to this standard is at the discretion of the Commanding Officer.
Night Systems Qualified (H) (694)	203, 204, 224, 225
Night System Qualified (L)(695)	324

Designation (TRACKING CODE)	Designation Requirements All designations require a letter signed by the Commanding Officer to be placed in the crew Chief's NATOPS jacket and APR.
Crew Chief I (690)	690 Evaluation Flight IAW OPNAVINST 3710.7 and a designation letter signed by the Commanding Officer.
Crew Chief II (691)	691 Evaluation Flight IAW OPNAVINST 3710.7 and a designation letter signed by the Commanding Officer.
Crew Chief III (692)	692 Evaluation Flight IAW OPNAVINST 3710.7 and a designation letter signed by the Commanding Officer.
Engine Run (610)	High-low power engine runs, 609 Must be complete and a designation letter signed by the Commanding Officer.
Taxi (612)	Upon completion of 612, you be authorized to taxi Squadron Aircraft. 611 Must be complete and a designation letter signed by the Commanding Officer.
Refueling Supervisor (670)	370, 371. Upon completion of an evaluation flight given by an authorized Instructor.
FCF (680)	IAW OPNAVINST 4790 and command specific directives
CCI (693)	501, 502, 503. Upon Completion of RQD-693, given by a NI the Commanding Officer should designate the IUT a CC Instructor.
NSI (696)	Upon certification by MAWTS-1, the CCUI will be designated a ,NSI by the Commanding Officer.
WTI (697)	Upon certification by MAWTS-1, the CCUI will be designated a WTI by the Commanding Officer.
ANI (698)	Upon Completion of evaluation Flight 698 and certification of the Model Manager, the CCUI will be designated a Assistant NATOPS Instructor by the Commanding Officer.
NI (699)	Upon completion of the 699 evaluation flight and certification by the Model Manager, the CCUI will be designated a NATOPS Instructor by the Commanding Officer.

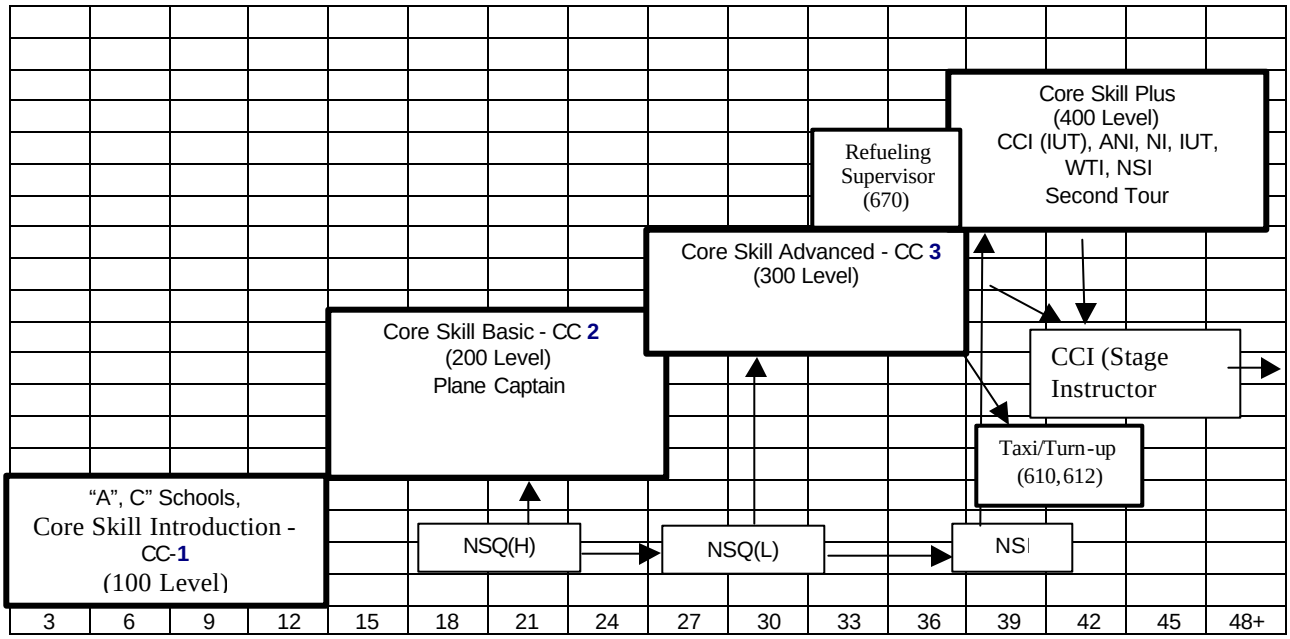
a. Instructor Requirements. A squadron should possess the following numbers of aircrew with the listed instructor designations IAW the KC-130 T&R and MCO 3500.12C (WTTP).

KC-130J Squadron 12 Aircraft Squadron	
INSTRUCTOR DESIGNATION	Crew Chiefs
CC I	6
NSI	4
WTI	4
ANI	5
NI	1

KC-130J 6 Plane Detachment	
INSTRUCTOR DESIGNATION	Crew Chiefs
CC I	2
NSI	2
WTI	2
ANI	3
NI	1

KC-130J 3 Plane Detachment	
INSTRUCTOR DESIGNATION	Crew Chiefs
CC I	1
NSI	1
WTI	1
ANI	1
NI	0

8. KC-130J Crew Chief Progression Model. The training progression model below provides recommended core skill, qualification, and designation attainment timelines for the average Crew Chief.



201. PROGRAM OF INSTRUCTION (POI) FOR BASIC, TRANSITION, AND CONVERSION CREW CHIEF

WEEKS	COURSE	PERFORMING ACTIVITY
1-6	Naval Aircrew Candidate Course (N2373C2)	MATSG-90 NAS Pensacola
7-10	Basic Aviation Machinist mate Course (ADJ) ("A" School)	MATSG-90 NAS Pensacola
11-13	Survival, evasion, Resistance, and Escape Course	North Island CA or Brunswick MA
14-24	KC-130J Crew Chief Organizational Ground Maintenance course. ("C" School)	CNNAT UNIT MCAS Cherry Point
25-48	Core Skill Introduction Training (Crew Chief Phase I)	Squadron
48-84	Core Skill Basic Crew Chief Phase II Training	Squadron
84-136	Core Skill Advanced Crew Chief Phase III training	Squadron
136-196	Core Skill Plus	Squadron

202. PROGRAM OF INSTRUCTION (POI) FOR SERIES CONVERSION CREW CHIEF

WEEKS	COURSE	PERFORMING ACTIVITY
1-7	Ground School KC-130J Crew Chief Conversion Organizational Ground Maintenance course. ("C" School)	CNNAT UNIT MCAS Cherry Point
8-15	Core Skill Introduction Training (Crew Chief Phase I)	Squadron
16-26	Core Skill Basic Crew Chief Phase II Training	Squadron
27-40	Core Skill Advanced Crew Chief Phase III training	Squadron
41-60	Core Skill Plus	Squadron

203. PROGRAM OF INSTRUCTION (POI) FOR REFRESHER CREW CHIEF

WEEKS	COURSE	PERFORMING ACTIVITY
1-4	Refresher Ground School	Squadron
5-12	Core Skill Introduction Training (Crew Chief Phase I)	Squadron
12-22	Core Skill Basic Crew Chief Phase II Training	Squadron
23-36	Core Skill Advanced Crew Chief Phase III training	Squadron
36-55	Core Skill Plus	Squadron

204. PROGRAM OF INSTRUCTION (POI) FOR SQUADRON INSTRUCTOR CREW CHIEF

WEEKS	COURSE	PERFORMING ACTIVITY
3	Standardization Training	Squadron

210. GROUND TRAINING COURSES OF INSTRUCTION

1. Ground training shall be conducted for each syllabus level.

2. Squadron level ground training required to complete the syllabus are listed in each syllabus level.

3. The following external ground training courses of instruction are required to complete the syllabus.

COURSE	ACTIVITY
Naval Aircrew Candidate School (NACCAS)	NAS Pensacola, FL
Basic Aviation Machinist Mate Course (ADJ)	NAS Pensacola. FL
KC-130J Crew Chief Organizational Ground Maintenance Course	MCAS Cherry Point, NC
Survival, Evasion, Resistance, and Escape (SERE) Course	NAS Brunswick ME, or NAS North Island CA
Weapons and Tactics Instructor Course	MAWTS-1
Threat Reaction (Ground) (THRX(I)(R))	MAWTS-1/Tactical Squadron
Defensive Tactics (DEFTAC)	MAWTS-1/Tactical Squadron
NITE lab	Tactical Squadron

4. The following external training courses are recommended to complete the syllabus:

COURSE	ACTIVITY
Advanced Airlift Tactics Training Course	AATTC, St. Joseph, MO
Environmental Survival Courses	Regional/Seasonal Survival Schools

211. AIRCREW TRAINING REFERENCES. The following references shall be utilized to ensure safe and standardized training procedures, grading criteria, and aircraft operation:

NATOPS General Flight and Operating Instructions (OPNAVINST 3710.7_)
NATOPS Flight Manuals (NFM)
NATOPS Air-to-Air Refueling Manual (AAR Manual)
KC-130 Tactical Manual (TACMAN)
T&R Program Manual
OPNAVINST 4790.2H
MAWTS-1 Course Catalog
Allied Tactical Publication - 56 (ATP-56) Air to Air Refueling
KC-130J Tactics, Techniques, and Procedures (TTP) Documents (AS REQUIRED)
Flight Clearance (FC) – issued by NAVAIR

220. BASIC, TRANSITION, AND MODEL CONVERSION CREW CHIEF TRAINING SUMMARY:

1. Core Skill Introduction Training Crew Chief 1

CORE SKILL INTRODUCTION TRAINING Crew Chief 1	Events		Hours		CRP	
	Flt	Grnd	Flt	Grnd	Flt	Grnd
Naval Aircrew Candidate School & SERE						
"A" & "C" Schools						
Cargo Passenger Loading (CPL)		1		2.0		5.0
Ground Familiarization Training		5		40.0		15.0
Familiarization	6		12.0		21.0	
Air Refueling (AR)	3		6.0		13.0	
Low Level Navigation (TACNAV)	1		2.0		3.0	
Rapid Ground Refueling (RGR)		1		1.0		3.0
NATOPS Check (RQD 690)	1		4.0			
TOTALS (Less Ground School)	11	7	24.0	43.0	37.0	23.0

2. Core Basic Training Crew Chief 2

CORE BASIC TRAINING By Stage	Events		Hours		CRP	
	Acft	Grnd	Acft	Grnd	Acft	Grnd
Night Systems (NS)	2		4.0		2.0	
Cargo and Passenger Loading (CPL)		1		2.0		1.0
Air Refueling (AR)	2		4.0		2.0	
Low Level Navigation (TACNAV)	3		6.0		3.0	
Long Range Navigation (LRNAV)	1		6.0		1.0	
Threat Reaction(THRX(I))	1		3.0		1.0	
Assault Landing Zone (ALZ)	3		6.0		3.0	
Rapid Ground Refueling (RGR)		2		2.0		2.0
RQD (System Reviews)	8		32.0			
NATOPS Check (RQD 691)	1		4.0			
TOTALS	21	3	64.0	4.0	12.0	3.0

3. Core Advanced Training Crew Chief 3

CORE ADVANCED TRAINING By Stage	Events		Hours		CRP	
	Acft	Grnd	Acft	Grnd	Acft	Grnd
Low Altitude Tactics (TACNAV)	2		4.0		10.0	
Aerial Delivery (AD)	1		1.0		5.0	
Threat Reaction(THRX(R))	1		3.0		6.0	
Rapid Ground Refueling (RGR)	2			2.0		4.0
MATMEP (Expeditionary Maintenance)						
NATOPS Check (RQD 614)	1		4.0			
TOTALS	7		12.0		21.0	4.0

4. Core Plus Training

CORE PLUS TRAINING By Stage	Events		Hours		CRP	
	Acft	Grnd	Acft	Grnd	Acft	Grnd
Defensive Tactics (DEFTAC)	2		2.0		5.0	
TOTALS	2		2.0		5.0	

221. SERIES CONVERSION CREW CHIEF TRAINING SUMMARY:

1. Core Skill Introduction Training Crew Chief 1

CORE SKILL INTRODUCTION TRAINING By Stage	Events		Hours		CRP	
	Acft	Grnd	Acft	Grnd	Acft	Grnd
Ground Familiarization Training		5		40.0		15.0
Cargo Passenger Loading (CPL)		1		2.0		5.0
Familiarization	6		12.0		21.0	
Air Refueling (AR)					13.0	
Low Level Navigation (TACNAV)					3.0	
Rapid Ground Refueling (RGR)		1		1.0		3.0
NATOPS Check (RQD 690)	1		4.00			
TOTALS	7	7	16.0	43.0	23.0	20.0

2. Core Basic Training Crew Chief 2

CORE BASIC TRAINING By Stage	Events		Hours		CRP	
	Acft	Grnd	Acft	Grnd	Acft	Grnd
Night Systems (NS)	2		4.0		2.0	
Cargo and Passenger Loading (CPL)		1		2.0		1.0
Air Refueling (AR)	1		2.0		2.0	
Low Level Navigation (TCNAV)	2		2.0		3.0	
Long Range Navigation (LRNAV)	1		6.0		1.0	
Threat Reaction(THRX(I))					1.0	
Assault Landing Zone (ALZ)	2		2.0		3.0	
Rapid Ground Refueling (RGR)		2		2.0		2.0
RQD (System Reviews)	8		32.0	0		
NATOPS Check (RQD 691)	1		4.00			
TOTALS	17	3	52.0	4.0	12	3.0

3. Core Advanced Training Crew Chief 3

CORE ADVANCED TRAINING By Stage	Events		Hours		CRP	
	Acft	Grnd	Acft	Grnd	Acft	Grnd
Low Altitude Tactics (TACNAV)					10.0	
Air Delivery (AD)	1		2.0		5.0	
Threat Reaction (THRX(I))	1		3.0		6.0	
Rapid Ground Refueling (RGR)						4.0
TOTALS	2		5.0		21.0	4.0

4. Core Plus Training

CORE PLUS TRAINING By Stage	Events		Hours		CRP	
	Acft	Grnd	Acft	Grnd	Acft	Sim
Threat Reaction (THRX(R))	1		1.0		5.0	
TOTALS	1		1.0		5.0	

222. REFRESHER CREW CHIEF TRAINING SUMMARY

1. Core Skill Introduction Training Crew Chief 1

CORE SKILL INTRODUCTION TRAINING By Stage	Events		Hours		CRP	
	Acft	Grnd	Acft	Grnd	Acft	Grnd
Familiarization						
Aerial Refueling						
NATOPS Check (RQD 690)						
TOTALS						

2. Core Basic Training Crew Chief 2

CORE BASIC TRAINING By Stage	Events		Hours		CRP	
	Acft	Grnd	Acft	Grnd	Acft	Grnd
Night Systems (NS)	2		4.0		2.0	
Cargo and Passenger Loading (CPL)		1		2.0		1.0
Air Refueling (AR)	1		2.0		2.0	
Low Level Navigation (TACNAV)	2		4.0		3.0	
Long Range Navigation (LRNAV)	1		6.0		1.0	
Threat Reaction(THRX(I))					1.0	
Assault Landing Zone (ALZ)	2		4.0		3.0	
Rapid Ground Refueling (RGR)		2		2.0		2.0
NATOPS Check (RQD 691)	1		4.0			
TOTALS	9	3	24.0	4.0	12.0	3.0

3. Core Advanced Training Crew Chief 3

CORE ADVANCED TRAINING By Stage	Events		Hours		CRP	
	Acft	Grnd	Acft	Grnd	Acft	Grnd
Low Altitude Tactics (TACNAV)					10.0	
Air Delivery (AD)	1		2.0		5.0	
Threat Reaction (THRX(I))	1		3.0		6.0	
Rapid Ground Refueling (RGR)						4.0
TOTALS	2		5.0		21.0	4.0

4. Core Plus Training

CORE PLUS TRAINING By Stage	Events		Hours		CRP	
	Acft	Grnd	Acft	Grnd	Acft	Grnd
Defensive Tactics (DEFTAC)	1		2.0		5.0	
TOTALS	1		1.0		5.0	

225. GRADUATE LEVEL COURSES. There are 3 graduate level courses (CC I, NSI, WTI) that qualify instructors for specific portions of the T&R syllabus. The requirements for these instructor certifications are contained in the MAWTS-1 Course Catalog. Squadron Stage Instructors will be designated by Commanding Officers and will instruct in specific T&R mission types, such as AR, AD, ALZ, RGR, and TACNAV.

230. EVENT PERFORMANCE REQUIREMENTS

1. General

a. The time required to train a KC-130J Crew Chief to Core Skill Plus will vary depending on previous Crew Chief experience. Basic, transition, and model conversion Crew Chief's shall be assigned the basic POI. Series conversion Crew Chiefs shall be assigned the SC POI. Crew Chief's returning from a DIFOP billet, who have previously been assigned to the Basic Crew Chief POI, shall be assigned to the Refresher POI. Commanding Officers will review the qualifications, previous experience, currency, and demonstrated ability of refresher Crew Chiefs with a view towards waiving and/or combining required flights.

b. Flights annotated with an N shall be flown at night without NVDs. Flights annotated with an (N) may be flown at night without NVDs. Flights annotated with an NS shall be flown at night utilizing NVDs. Flights annotated with an (NS) may be flown at night utilizing NVDs.

c. All flights annotated with an "E" shall be evaluated per the Aviation T&R Program Manual.

d. Crew Chiefs not NSQ and conducting NS training as a crewmember shall be instructed by an NSI for all Core Basic NSQ syllabus initial codes. Subsequent events may be flown with a proficient NSQ crewmember provided the crewmember meets the requirements for the associated code.

e. For NS operations, the fixed-wing minimum altitudes delineated in the Aviation T&R Program Manual, shall be adhered to in all phases of flight except for ALZ operations and airdrops from IP inbound, at which point a descent to airdrop altitude or final approach procedure may be conducted. Minimum altitudes for Aerial Delivery shall be as per NWP 3-22.5-KC-130, Vol. 1, Chapter 6 and Appendix H.

2. Crew Resource Management. Crew Resource Management shall be briefed for all flights and events.

231. CORE SKILL INTRODUCTION TRAINING

1. General. Upon completion of this phase of training, the Crew Chief will be NATOPS qualified as a Crew Chief 1. The Crew Chief will be capable basic aircraft operation to include emergency procedures, crew resource management.

2. Cargo Passenger Loading Trainer (1 Events, 2.0 Hours)

a. Purpose. Introduce the student to general theory of cargo and passenger loading. A load simulator is the preferred training device for this stage, but a KC-130J aircraft may be used as a substitute. At the end of this phase of instruction the student will be familiar with basic cargo/passenger loading techniques, and a basic understanding of weight and balance.

b. General. Basic, transition, model conversion, and refresher Crew Chiefs (CCUI) shall be trained by a qualified Instructor for this phase of training.

c. Crew Requirements. CCUI and qualified Instructor.

d. Ground/Academic Training. Completion of CPL ground course given by a qualified instructor.

e. Flights and Simulator Event Training (1 Events, 2.0 Hours)

CPL-000 2.0 T,SC 1 LST S

Goal. Introduce the Crew Chief to general procedures for loading cargo and passengers without the aid of external loading equipment on either a cargo or tanker configured aircraft.

Requirement. The Crew Chief, under the direct supervision of a qualified Instructor, will configure an aircraft for flight to transport 19 passengers, loose cargo up to a maximum of 1,500lbs in the cargo compartment. With special emphasis being placed on tie down procedures, ramp and cargo door operations, and hazardous materials identification. The Crew Chief will prepare a DD Form 365-4 with the emphasis placed on accuracy in the take-off & landing conditions, limitations, zero fuel weight, and center of gravity sections. In-flight cargo jettison procedures will be thoroughly explained.

Performance Standard. Satisfactory completion per NFM and NA 01-75GAJ-9

Prerequisites. N/A

Ordnance. N/A

External Syllabus Support. N/A

3. Familiarization

a. Purpose. Train the student to perform the basic NATOPS flight crew requirements, aircraft preflight preparation, location and use of emergency equipment, ground and in-flight emergency procedures, aircraft post flight procedures, systems operation, system malfunctions, corrective actions, and fault isolation shall be emphasized. Instructions will be provided to the student demonstrating the location/conduct of the aircrew mission brief, the proper filing of the weight and balance form, DD Form 365-4, and galley preparations for a flight. At the completion of this phase, the crew chief-under-instruction (CCUI) will be NATOPS qualified, designated a "CREW CHIEF I" RQD 690. CCUIs shall be instructed by designated Crew Chief Instructors (RQD-693).

b. General. Basic, transition, model conversion, and refresher Crew Chiefs (CCUI) shall be trained by a qualified Instructor for this phase of training.

C. Crew Requirements. CCUI and qualified Instructor.

d. Ground/Academic Training. Prior to FAM-100, all Basic/Transition/Conversion/Refresher Crew Chiefs shall complete ground school course consisting of aircraft systems descriptions, normal and emergency procedures, cockpit resource management, basic weight and balance, aircraft pre-flight and post-flight procedures, emergency evacuation procedures, bailout procedures, donning and use of all emergency equipment.

e. Flight and Simulator Event Training (5 Events, 40.0 Hours)

FAM-001 8.0 T,SC 1 GFT S A

Goal. Introduce crewmember student to fuel and hydraulic servicing, hazard areas, emergency signals, ground evacuation, APU

fire procedures, and aircraft preflight, post-flight, normal and emergency procedures per current instructions. To include familiarizing with cockpit preflight procedures, CNI-MU, AMU, ACAWS messages, avionics displays, aircraft lighting and expanded and abbreviated checklists.

Requirement. The student, under the direct supervision of a qualified Instructor, will conduct a full aircraft preflight and post-flight inspection with emphasis on external preflight and external power procedures. The student will also be given detailed instruction on fuel and hydraulic servicing, hazard areas, emergency signals, ground evacuation, APU fire emergency procedures, and will demonstrate the ability to execute the expanded and abbreviated checklists and utilize these checklists to demonstrate aircraft boot-up, CNI-MU power up, performance initialization, TOLD input procedures, and the interoperability of the CNI-MU, AMU, CNBP, HDD and aircraft lighting.

Performance Standard. Satisfactory completion per NFM and associated MIMs.

Prerequisites. N/A

Ordnance. N/A

External Syllabus Support. N/A

FAM-002 8.0 T,SC 1 GFT S A

Goal. Introduce ramp and door manual extension, in-flight door warning, rapid decompression, fire/smoke and fume elimination. Practice aircraft preflight, post-flight, normal and emergency procedures per current instructions. To include familiarizing the student with cockpit preflight procedures, hard and soft panel system component operation and associated ACAWS messages. Introduce APU start, engine start, and all normal and emergency procedures and unique capabilities.

Requirement. The student, under the direct supervision of a qualified Instructor, will conduct a full aircraft preflight and post-flight inspection with emphasis on internal preflight and APU power procedures. The student will also be given detailed instruction on ramp and door manual extension, In-flight door open warning, Rapid Decompression, and Fire/Smoke and Fume elimination emergency procedures.

Performance Standard. Satisfactory completion per NFM and associated MIMs.

Prerequisites. N/A

Ordnance. N/A

External Syllabus Support. N/A

FAM-003 8.0 T,SC 1 GFT S A

Goal. Introduce detailed instruction on CNI manual data entry, cargo compartment emergency equipment, ditching, and bailout procedures. Practice aircraft preflight, post-flight, normal and emergency procedures, and familiarize the student with the APU and engine start, and all normal and emergency procedures and unique capabilities per current instructions.

Requirement. The student, under the direct supervision of a qualified Instructor, will conduct a full aircraft preflight and post-flight inspection with emphasis on power up checklist and cargo compartment preflight procedures. The student will also be given detailed instruction on CNI manual data entry, cargo compartment emergency equipment, ditching, and bailout emergency procedures, and the ability to start the APU and be familiar with the execution of all associated APU emergency procedures. He will also demonstrate a functional knowledge of all checklists, normal procedures, ACAWS actions and emergency procedures associated with Engine starts.

Performance Standard. Satisfactory completion per NFM and associated MIMs.

Prerequisites. N/A

Ordnance. N/A

External Syllabus Support. N/A

FAM-004 8.0 T,SC 1 GFT S A

Goal. Introduce CNBP and AMU operation, landing gear system emergency procedures, and familiarize the student with fuel management panels and controls to include refueling, defueling and fuel transfer. Practice aircraft preflight, post-flight, normal and emergency procedures per current instructions.

Requirement. The student, under the direct supervision of a qualified Instructor, will conduct a full aircraft preflight and post-flight inspection with emphasis on CNBP and AMU operation as it pertains to fuel management to include refueling, de-fueling, and fuel transfer. He will also demonstrate knowledge of all associated notes, cautions and warnings pertaining to fuel management. The student will also be given detailed instruction on landing gear system emergency procedures.

Performance Standard. Satisfactory completion per NFM and associated MIMs.

Prerequisites. N/A

Ordnance. N/A

External Syllabus Support. N/A

FAM-005 8.0 T,SC 1 GFT S A

Goal. Introduce flap system emergency procedures and IFR system preflight and panel operations, hose deployment failure, drogue/hose damage, unstable hose and hose jettison procedures. Practice aircraft preflight, post-flight, normal and emergency procedures per current instructions.

Requirement. The student, under the direct supervision of a qualified Instructor, will conduct a full aircraft preflight and post-flight inspection with emphasis on IFR panel operations and IFR preflight procedures. The student will also be given detailed instruction on hose deployment failure, drogue/hose damage, unstable hose and hose jettison emergency procedures. The student will also be given detailed instruction on flap system emergency procedures.

Performance Standard. Satisfactory completion per NFM and associated MIMs.

Prerequisites. N/A

Ordnance. N/A

External Syllabus Support. N/A

f. Flight and Simulator Event Training (11 Events, 22.0 Hours)

FAM-100 2.0 T,SC,R 1 KC-130 A

Goal. Continue instructions on standard NATOPS procedures, duties and responsibilities during normal operations to include aircraft preflight, post-flight, and turnaround inspections emphasize the importance of system knowledge as it applies to in-flight diagnostics. Normal and emergency procedures per current instructions.

Requirement. The student, under the direct supervision of a qualified instructor, will conduct a full aircraft preflight and post-flight inspection. The student will demonstrate a thorough knowledge of fuel and hydraulic servicing, hazard areas, emergency signals, ground evacuation, and APU fire emergency procedures. The student will prepare a complete DD Form 365-4.

Performance Standard Satisfactory completion per NFM and associated MIMs.

Prerequisites. N/A

Ordnance. N/A

External Syllabus Support. N/A

FAM-101 2.0 T,SC,R 1 KC-130 A

Goal. Continue instructions on standard NATOPS procedures, duties

and responsibilities during normal operations to include aircraft preflight, post-flight, normal and emergency procedures per current instructions. Emphasize the propulsion system, to include, engine, propeller, APU and their limitations and how it applies to pre-flight and in-flight fault isolation.

Requirement. The student, under the direct supervision of a qualified Instructor, will conduct a full aircraft preflight and post-flight inspection. The student will demonstrate a thorough knowledge of ramp and door manual extension, in-flight door open warning, rapid decompression, and fire/smoke and fume elimination emergency procedures and a basic system knowledge of the propulsion system. The student will prepare a complete DD Form 365-4.

Performance Standard. Satisfactory completion per NFM and associated MIMs.

Prerequisite. FAM-100.

Ordnance. N/A

External Syllabus Support. N/A

FAM-102 2.0 T,SC,R 1 KC-130 A

Goal. Continue instructions on standard NATOPS procedures, duties and responsibilities during normal operations to include aircraft preflight, post-flight, normal and emergency procedures per current instructions. Emphasize the electrical and COM/NAV systems and their limitations and how it applies to pre-flight and in-flight fault isolation.

Requirement. The student, under the direct supervision of a qualified Instructor, will conduct a full aircraft preflight and post-flight inspection. The student will also demonstrate a thorough knowledge of CNI manual data entry, cargo compartment emergency equipment, ditching, and bailout emergency procedures, and a basic system knowledge of the COM/NAV and electrical system. The student will prepare a complete DD Form 365-4.

Performance Standard. Satisfactory completion per NFM and associated MIMs.

Prerequisite. FAM-101 must be completed prior to this flight.

Ordnance. N/A

External Syllabus Support. N/A

FAM-103 2.0 T,SC,R 1 KC-130 A

Goal. Continue instructions on standard NATOPS procedures, duties and responsibilities during normal operations to include aircraft preflight, post-flight, normal and emergency procedures per current instructions. Emphasize the BAECS system, to include, A/C pressurization, anti and de-ice, and lox and their limitations and how it applies to pre-flight and in-flight fault isolation.

Requirement. The student, under the direct supervision of a qualified Instructor, will conduct a full aircraft preflight and post-flight inspection with emphasis on CNBP and AMU operation, and the student will demonstrate a basic system knowledge of the COM/NAV and electrical system. The student will also be given detailed instruction on landing gear system emergency procedures. The student will prepare a complete DD Form 365-4.

Performance Standard. Satisfactory completion per NFM and associated MIMs.

Prerequisite. FAM-102 must be completed prior to this flight.

Ordnance. N/A

External Syllabus Support. N/A

FAM-104 2.0 T,SC 1 KC-130 A

Goal. Continue instructions on standard NATOPS procedures, duties and responsibilities during normal operations to include aircraft preflight, post-flight, normal and emergency procedures per current instructions. Emphasize the fuel system, to include, refueling, defueling and the aerial refueling system and the limitations and how it applies to pre-flight and in-flight fault isolation.

Requirement. The student, under the direct supervision of a qualified Instructor, will conduct a full aircraft preflight and post-flight inspection. The student will also demonstrate a thorough knowledge of flap system emergency procedures and a basic system knowledge of the fuel system. The student will also be given detailed instruction on fuel system emergency procedures. The student will prepare a complete DD Form 365-4.

Performance Standard. Satisfactory completion per NFM and associated MIMs.

Prerequisite. FAM-103 must be completed prior to this flight.

Ordnance. N/A

External Syllabus Support. N/A

FAM-105 2.0 T,SC,R 1 KC-130 A

Goal. Continue instructions on standard NATOPS procedures, duties and responsibilities during normal operations to include aircraft preflight, post-flight, normal and emergency procedures per current instructions. Emphasize the hydraulic system and its limitations and how it applies to pre-flight and in-flight fault isolation.

Requirement. The student, under the direct supervision of a qualified Instructor, will conduct a full aircraft preflight, post-flight and IFR preflight procedures. The student will also

demonstrate a thorough knowledge of hose deployment failure, drogue/hose damage, unstable hose and hose jettison emergency procedures and a basic system knowledge of the fuel system. The student will prepare a complete DD Form 365-4.

Performance Standard Satisfactory completion per NFM, NA 00-80T-110, and associated MIMs.

Prerequisites. FAM-104 must be completed prior to this flight.

Ordnance. N/A

External Syllabus Support. N/A

2. Tactical Navigation

a. Purpose. Introduce the Crew Chief with skills and duties of aft lookout doctrine in the low level navigation environment.

b. General. The CCUI will under the instruction of a qualified instructor, demonstrate threat recognition, and hazards associated in the tactical navigation regime.

c. Crew Requirements. PF, PM, ACS, and two observers and qualified Instructor.

d. Ground/Academic Training. The student shall be familiar with the NFM, TACMAN and associated MAWTS-1 courseware that relates to the TACNAV environment.

e. Flight and Simulator Event Training (1 Events, 2.0 Hours)

TACNAVV-133 2.0 T,SC 1 KC-130 A

Goal. Introduce the student to the duties of an aft lookout during daytime Low Level Navigation mission.

Requirement. The student will perform the duties of an aft lookout during a low level mission. Emphasis will be placed on cargo compartment preparation, crew briefing, lookout doctrine, scan for threats and terrain clearance, crew coordination and combat entry/exit checklists.

Performance Standard. Satisfactory completion of procedures per the NFM, KC-130 TACMAN, and TTP (AS REQUIRED).

Prerequisites. N/A

Ordnance. N/A

External Syllabus Support. N/A

3. Air Refueling

a. Purpose. Familiarize Crew Chiefs with basic air refueling procedures. CCUIs will be instructed by designated CCIs, WTIs, ANI, NI or NSIs (when required).

b. General. Train the student to perform the duties of an in-flight refueling observer. At the end of this phase of training the student will be able to:

(1) Preflight the aircraft per specific mission requirements.

(2) Compute and file an accurate weight and balance form for the aircraft.

(3) Perform duties as an in-flight refueling observer during hose checks, correctly identifying the status of the system's operation, and coordinating this status with the Crew.

(4) Perform duties as an in-flight refueling observer during refueling operations, correctly informing the Plane Commander of the status of the refueling system & receiver aircraft.

(5) Correctly perform all related emergency procedures as necessary.

a. Crew Requirements. PF, PM, ACS, and one observer per operated aerial refueling pod and qualified Instructor.

b. Ground/Academic Training. Prior to AR-150, The student will have successfully completed the familiarization codes prior to conducting this phase of training.

e. Flight and Simulator Event Training (3 Events, 6.0 Hours)

AR-150 2.0 T,SC,R 1 KC-130 A

Goal. Introduce the student to the duties of an in-flight refueling observer during a day fixed-wing/Tilt Rotor aerial refueling mission. Emphasis should be placed on functional knowledge and use of the refueling system, to include system limitations and normal, emergency and alternate procedures.

Requirement. The student, under the direct supervision of a qualified Instructor, will complete a DD Form 365-4, conduct an aircraft preflight for an aerial refueling mission. The student will observe a qualified in-flight refueling observer during a day aerial refueling mission. The student will keep separate records for comparison at the end of the flight. This flight should involve refueling multiple aircraft. The student should observe from both sides of the aircraft and monitor the ICS and all radio transmissions during the entire evolution. The student will demonstrate a thorough understanding of all aerial refueling terminology and the use of EMCON procedures. Emphasis should be placed on functional knowledge and use of the refueling system, to include system limitations and normal, emergency and alternate procedures.

Performance Standard. This flight evaluation will be conducted PER NFM and the NA 00-80T-110.

Prerequisites. N/A

Ordnance. N/A

External Syllabus Support. Fixed Wing or Tilt/Rotor receiver.

AR-151 2.0 T,SC 1 KC-130 A

Goal. Introduce the student to the duties of an in-flight refueling observer during a day rotary-wing aerial refueling mission. Emphasis should be placed on functional knowledge and use of the refueling system, to include system limitations and normal, emergency and alternate procedures.

Requirement. The student will complete and file a DD Form 365-4, conduct an aircraft preflight for a rotary-wing Aerial Refueling mission, and observe a qualified in-flight refueling observer during a day helicopter aerial refueling mission. The student will keep separate records for comparison at the end of the flight. This flight should involve refueling multiple aircraft. The student should observe from both sides of the aircraft and monitor the ICS & all radio transmissions during the entire evolution. The student will demonstrate a thorough understanding of all Rotary Wing Aerial Refueling terminology and the use of EMCON procedures. Emphasis should be placed on functional knowledge and use of the refueling system, to include system limitations and normal, emergency and alternate procedures.

Performance Standard. This flight evaluation will be conducted PER NFM and the NA 00-80T-110.

Prerequisites. N/A

Ordnance. N/A

External Syllabus Support. Rotary Wing Receiver.

AR-159 2.0 T,SC,R E 1 KC-130 A

Goal. Evaluate the student in the duties of an in-flight refueling observer during a day fixed-wing, rotary wing or tilt-rotor aerial refueling mission. Emphasis should be placed on functional knowledge and use of the refueling system, to include system limitations and normal, emergency and alternate procedures.

Requirement. The student will perform the duties of an in-flight refueling observer during a day aerial refueling mission. Emphasis will be placed on correct terminology, EMCON procedures safety, emergency procedures, ICS, discipline, and crew coordination during all phases of the flight. A demonstrated knowledge of the following; functional knowledge and use of the refueling system, to include system limitations and normal, emergency and alternate procedures.

Prerequisite. AR-150 and AR-151 must be completed prior to this flight.

Performance Standard. This flight evaluation will be conducted PER NFM and the NA 00-80T-110

Prerequisites. N/A

Ordnance. N/A

External Syllabus Support. An applicable receiver aircraft.

4. Rapid Ground Refueling Demonstration

a. Purpose. Introduce the student to planning, identifying the required equipment, set up, and break down of the rapid ground refueling system for rotary, tilt rotor and fixed-wing aircraft.

b. General. This phase of training will be conducted by a qualified instructor (CCI).

c. Crew Requirements. PF, PM, CC and LMs as required for RGR site and a qualified Instructor.

d. Ground/Academic Training. The student will be familiar with the TACMAN procedures and associated MAWTS-1 courseware.

e. Flight and Simulator Event Training (1 Events, 1.0 hours)

RGR-170 1.0 T 1 KC-130 A

Goal. Introduce the student to the procedures for a 2-point. Requirement. The student will observe: a preflight, set up, and simulate a 2-point RGR operation. Instruction will include the inspection of all RGR equipment, breakdown of refueling points, and related post flight duties. Emphasis will be placed on the refueling system, system operation and fault isolation as it would effect the RGR mission in an austere environment.

Requirement. The student will perform the duties of a safety observer or point man on a RGR. Emphasis will be placed on safety and point man duties. The student will demonstrate a basic understanding of the fuel system as it applies to the RGR mission.

Performance Standard. Satisfactory completion of procedures per the NFM, KC-130 TACMAN, and TTP (AS REQUIRED).

Prerequisites. N/A

Ordnance. N/A

External Syllabus Support. N/A

6. NATOPS Check

a. Purpose. Conduct a Crew Chief II NATOPS evaluation.

b. General. NATOPS check may be conducted any time after completion of the Core Skill Introduction FAM stage. Commanders shall not designate replacement Crew Chiefs as a CC 1 until satisfactory completion of the entire Core Skill Introduction phase. Upon NATOPS check completion, Crew Chiefs

shall log the RQD-690 tracking code. This code will be used for scheduling subsequent annual Crew Chief 1 NATOPS checks. The provisions of the NFM and OPNAVINSTINST 3710.7_ apply.

232. CORE SKILL BASIC TRAINING

1. General. Upon completion of this phase of training, the Crew Chief will be daytime and Night System Qualified in the non-LAT (NSQ)environment for the basic core skill mission areas. They include tactical navigation(TACNAV) in a threat environment(THRX(I)), Assault Landing Zone operations (ALZ), FW/RW/TRW air-to-air refueling (AR), rapid ground refueling(RGR) operations and long range operation. The focus will be on flight crew resource management, aircraft preflight preparation, location and use of emergency equipment, ground and in-flight emergency procedures, aircraft post flight procedures, systems operation, system malfunctions, corrective actions, fault isolation and in-flight fault isolation. At the completion of this phase, the crew chief-under-instruction (CCUI) will be NATOPS qualified, designated a “CREW CHIEF II” RQD 691.

a. Crew Chiefs receiving initial training shall be instructed by either current Squadron Crew Chief Instructors, WTIs or NSIs (as required). Once they have completed the initial event, subsequent events shall be flown with like qualified aircrew.

2. NIGHT SYSTEMS

a. Purpose. To develop proficiency at operating aircraft at night using night vision devices in a non-LAT environment.

b. General.

(1) Crew Chief conducting NS training shall be instructed by an NSI for all initial codes. Subsequent events and non-syllabus NS codes or NS optional codes may be flown with a proficient NSQ crewmember as long as the Crew Chief has the prerequisites for the event.

c. Crew Requirements. NATOPS minimum crew or greater unless otherwise specified for the event.

d. Ground/Academic Training. MAWTS-1 NVD ASP courses and NITE lab (includes Night Vision Systems, N.S. Human Factors and Night Environment ASPs).

e. Flight and Simulator Event Training (2 Events,4 hours)

NS-203 2.0 T,SC,R 1 KC-130J A NS

Goal. HLL NVD Operations

Requirement. Preflight shall include a flight station, cargo compartment and exterior lighting demonstration with NVDs. The crew chief will perform the duties of an aft lookout during a low level mission using NVDs. Emphasis will be placed on cargo compartment preparation, crew briefing, lookout doctrine, scan for threat, crew coordination and combat entry/exit checklists under high light conditions. An NSI is required with a NON-NSQ crewmember. If the crewmember is NSQ but has not completed this code using NVDs, it must be flown with a qualified instructor that is NSQ or an NSI. Mission must be flown IAW the T&R Program Manual high light level standards.

Performance Standard. Satisfactory completion per NFM, KC-130J TTP (AS REQUIRED), and OPNAVINST 3710.7_.

Prerequisite. MAWTS-1 NVD ASP ground instruction and NITE lab.

Ordnance. N/A

External Syllabus Support. N/A

NS-204 2.0 T,SC,R 1 KC-130J A NS

Goal. LLL NVD Operations

Requirement. Conduct all operations included in NS-203 under LLL conditions.

Performance Standard. Satisfactory completion per NFM, KC-130J TTP (AS REQUIRED), and OPNAVINST 3710.7_.

Prerequisite. NS-203.

Ordnance. N/A

External Syllabus Support. N/A

3. Cargo and Passenger Flights

a. Purpose. To qualify and maintain the crewmember's cargo and passenger loading capability.

b. General. Qualify or maintain proficiency of the Crew Chief in loading limited passengers and baggage as well as limited cargo loading and offloading. A qualified instructor will instruct this phase of training.

c. Crew Requirements. CCUI and a qualified Instructor.

d. Ground/Academic Training. The Crew Chief will be familiar with the loading manual NA 01-75GAA-9 and all applicable limitations.

e. Flight and Simulator Event Training (1 Events, 2.0 Hours)

CPL-205 2.0 T,SC,R 1 LST S

Goal. Refine and qualify the Crew Chief to general procedures for loading cargo and passengers without the aid of external loading equipment on either a cargo or tanker configured aircraft.

Requirement. The Crew Chief, under the direct supervision of a qualified Instructor, will configure an aircraft for flight to transport 19 passengers, loose cargo up to a maximum of 1,500lbs in the cargo compartment. With special emphasis being placed on tie down procedures, ramp and cargo door operations, and hazardous materials identification. The Crew Chief will prepare a DD Form 365-4 with the emphasis placed on accuracy in the take-off & landing conditions, limitations, zero fuel weight, and center of gravity sections. In-flight cargo jettison procedures will be thoroughly explained.

Performance Standard. Satisfactory completion per NFM and NA 01-

75GAJ-9

Prerequisites. N/A

Ordnance. N/A

External Syllabus Support. N/A

4. Long Range Navigation

a. Purpose. Train the Crew Chief for extended over-water operations in the ICAO environment.

c. Crew Requirements. Standard crew as per NFM.

d. Ground/Academic Training. Review use of computer-based mission planning, PMA/GMS deployed functionality, CNI-MU functionality, radar operation, fuel panel operation, and NATOPS long-range cruise considerations.

c. Flight and Simulator Event Training (1 Events, 6.0 Hours)

LRNAV-213 6.0 T,SC,R 1 KC-130J A (N) (NS)

Goal. Practice long-range, over-water procedures and GMS/PMA capabilities deployed as it applies to the ICAO environment.

Requirement. Emphasis should be placed on functional knowledge and use of the aircraft systems, to include system limitations and normal, emergency procedures to encompass all aircraft systems for in-flight fault isolation and fault isolation. The student should demonstrate the ability to operate in the ICAO environment in reference to ground support, coordinating maintenance and logistics in this environment.

Performance Standard. Per the NFM and pertinent ICAO publications.

Prerequisite. N/A

Ordnance. N/A

External Syllabus Support. N/A

5. Tactical Navigation

a. Purpose. Qualify the crewmember, or to maintain proficiency for the LL qualified crewmember, in the unique tasks and requirements associated with low level flights.

b. General.

(1) Crew Chief conducting NS training shall be instructed by an NSI for all NSQ syllabus initial codes. Subsequent events and non-syllabus NS or NS optional codes may be initially flown with a proficient NSQ Crew Chief as long as the Crew Chief has met the prerequisites for the event.

(2) A qualified instructor (CCI) shall accompany all initial qualified crewmembers.

c. Crew Requirements. PF, PM, AC/S, and two observers which may be any combination of LMs or CCs.

d. Academic/Ground Training. Review NATOPS Flight Manual, KC-130 TACMAN, and MAWTS-1 ASP Low Level Navigation Courseware.

a. Flight and Simulator Event Training (2 Events, 4.0 Hours).

TACNAV-223 2.0 T,SC,R 1 KC-130J A

Goal. Introduce and qualify the Crew Chief in TACNAV aft lookout duties.

Requirement. The crewmember will perform the duties of an aft lookout during a day low-level mission Emphasis will be placed on cargo compartment preparation, crew briefing, lookout doctrine, scan for threats and terrain clearance, crew coordination and combat entry/exit checklists.

Performance Standard. Satisfactory completion of the procedures per the NFM, KC-130 TACMAN and TTP (AS REQUIRED), and MCCRES standards.

Prerequisite. N/A

Ordnance. N/A

External Syllabus Support. Published and scheduled VR/IR/SR route or appropriate Warning/Restricted/Military Operating areas.

TACNAV-224 2.0 T,SC,R 1 KC-130J A NS

Goal. Introduce and qualify the Crew Chief in TACNAV aft lookout doctrine using NVDs during high light level.

Requirement. The crewmember will perform the duties of an aft lookout during a high light low level mission using NVDs. Emphasis will be placed on cargo compartment preparation, crew briefing, lookout doctrine, scan for threat, crew coordination and combat entry/exit checklists.. An NSI is required with a NON-NSQ crewmember. Minimum altitude CL but no lower than 500 AGL.

Performance Standard. Satisfactory completion of the procedures per the NFM, KC-130 TACMAN, TTP (AS REQUIRED), and MCCRES standards.

Prerequisite. TACNAV-223, initial code, Crewmember must complete Night Lab and MAWTS-1 approved ground course prior to conducting this mission.

Ordnance. N/A

External Syllabus Support. Published and scheduled VR/IR/SR route or appropriate Warning/Restricted/Military Operating

areas.

TACNAV-225 2.0 T,SC 1 KC-130J A NS

Goal. Introduce and qualify the Crew Chief in TACNAV aft lookout doctrine using NVDs during low light level.

Requirement. The crewmember will perform the duties of an aft lookout during a low light low level mission using NVDs. Emphasis will be placed on cargo compartment preparation, crew briefing, lookout doctrine, scan for threat, crew coordination and combat entry/exit checklists. An NSI is required with a NON-NSQ crewmember. Minimum altitude CL but no lower than 1000 AGL.

Performance Standard. Satisfactory completion of the procedures per the NFM, KC-130 TACMAN, TTP (AS REQUIRED), and MCCRES standards.

Prerequisite. TACNAV-223, initial code, Crewmember must complete Night Lab and MAWTS-1 approved ground course prior to conducting this mission.

Ordnance. N/A

External Syllabus Support. Published and scheduled VR/IR/SR route or appropriate Warning/Restricted/Military Operating areas.

5. Threat Reaction (IR) (THRX(I))

a. Purpose. Introduce the Crew Chief and maintain currency in the coordinated use of defensive maneuvering and the Aircraft Survivability Suite (ASE) against surface-to-air threat systems.

b. General

(1) Aircraft must have fully operational ASE suite.

(2) Appropriate chaff and decoy flares must be loaded prior to flight.

(3) Threat emitters must be available.

c. Ground Training. Prior to THRX(I)-240, the Crew Chief shall review pertinent chapters in the KC-130 TACMAN and receive:

(1) MAWTS-1 ASP course on tactical aircrew coordination.

(2) MAWTS-1 ASP course on MAGTF ground based air defense system (GBADS).

(3) MAWTS-1 ASP course on KC-130 specific threat counter-tactics.

(4) Specific training on installed KC-130J ASE equipment.

d. External Support

(1) Threat Emitters.

(2) Smokey SAMs (optional).

e. Flight and Simulator Event Training (1 Events, 3.0 Hours)

THRX(I)-240 3.0 T,SC,R KC-130 A (N) (NS)

Goal. Ground IR threat

Requirement. Introduce the use of the ASE suite, in combination with appropriate tactical maneuvering, to defeat threat weapons systems. Demonstrate an understanding of the tactical employment of installed ASE equipment in all modes of operation. The CCUI should be exposed to a variety of threat situations of increasing intensity and instructed on the best tactical means assuring the survival of the aircraft and the subsequent accomplishment of the mission. An NSI is required with a NON-NSQ crewmember. Emphasis is to be placed on system operation and fault isolation in the threat environment.

Performance Standard. Satisfactory execution of procedures per the MAWTS-1 ASP, NFM, KC-130 TACMAN, and TTP (AS REQUIRED).

Prerequisite. RQD-694 as applicable.

Ordnance. 240 MJU-8 Training Flares.

External Syllabus Support. Scheduled appropriate counter-measures range.

6. AERIAL REFUELING

a. Purpose. Continue instruction on the duties of an in-flight refueling observer, or to maintain proficiency for the A/R qualified crewmember, during day and night tactical refueling mission.

b. General.

(1) Crew Chiefs conducting NS training shall be instructed by an NSI for all NSQ-HI syllabus initial codes. Subsequent events and non-syllabus NS or NS optional codes may be initially flown with a proficient NSQ Crew Chief as long as the Crew Chief has met the prerequisites for the event.

(2) A qualified instructor (CCI) shall accompany all initial qualified crewmembers.

a. Crew Requirements. PF, PM, AC/S, and a minimum of one CM per functioning aerial refueling pod (observers).

b. Ground/Academic Training. Aerial Refueling System Course, Review NATOPS Flight Manual, NATOPS flight manual supplements, NATOPS Air-to-Air Refueling Manual, KC-130 TACMAN, and MAWTS-1 Tactical AR Courseware relating to fixed-wing AR procedures.

b. Flight and Simulator Event Training (3 Event, 6 Hours).

AR-250 2.0 T,SC 1 KC-130J A (N) (NS)

Goal. Introduce, qualify or maintain proficiency in the duties of an in-flight refueling observer in rotary wing AR for AR

qualified crewmembers.

Requirement. The crewmember will perform duties of an in-flight refueling observer during a rotary wing AR. Emphasis will be on correct terminology, safety, emergency procedures, ICS discipline, and crew coordination during all phases of the operation. The student will demonstrate a thorough understanding of all Aerial Refueling terminology, and the use of EMCON procedures is optional, as well as functional knowledge and use of the refueling system, to include system limitations and normal, emergency and alternate procedures, as it would apply to degraded system operation and in-flight fault isolation and diagnostics. This sortie will be used for the maintenance of proficiency in Low Speed AR for AR qualified Crew Chiefs. Missions utilizing NVDs will be annotated as a RQD 650.

Performance Standard. Satisfactory completion of the procedures per the NFM, AR Manual, and KC-130 TACMAN.

Prerequisite. Crew Chief I, MAWTS-1 NVD ASP, ground instruction, NITE lab, NS 203, 204 and Day AR 250 as applicable.

Ordnance. N/A

External Syllabus Support. Rotary wing receiver aircraft.

AR-251 2.0 T,SC,R 1 KC-130J/WST A/S (N) (NS)

Goal. Introduce, qualify or maintain proficiency in the duties of an in-flight refueling observer during a fixed wing/tilt rotor aerial refueling missions. This code can be obtained on either a fixed-wing or tilt-rotor AR mission.

Requirement. The student will conduct a full aircraft preflight for Aerial Refueling mission, and perform the duties of an in-flight refueling observer during a night aerial refueling mission. The student will keep all records for the flight. This flight should involve refueling multiple aircraft. The student should monitor the ICS & all radio transmissions during the entire evolution. The student will demonstrate a thorough understanding of all Aerial Refueling terminology, and the use of EMCON procedures is optional, as well as functional knowledge and use of the refueling system, to include system limitations and normal, emergency and alternate procedures, as it would apply to degraded system operation and in-flight fault isolation and diagnostics. Missions utilizing NVDs will be annotated as a RQD 651.

Performance Standard. Satisfactory completion of the procedures per the NFM, AR Manual, and KC-130 TACMAN.

Prerequisite. Crew Chief I, MAWTS-1 NVD ASP, ground instruction, NITE lab, NS 203, 204 and AR 251 as applicable.

Ordnance. N/A

External Syllabus Support. Fixed wing/Tilt Rotor receiver aircraft.

7. Assault Landing Zone (ALZ)

a. Purpose. Introduce day and night Assault Landing Zone operations, introduce the use of NVDs in the ALZ environment to include ERO operation and aircraft ALZ preparation.

b. Ground Training. Review Assault Landing Zone operations in KC-130 TACMAN. Review MAWTS-1 ASP ALZ courseware. Familiarize the Crew Chief with ground flotation and performance data and applicable pubs for unimproved runway operation.

c. Crew Requirements. Standard crew as per NFM.

d. Ground/Academic Training. The student will be familiar with the applicable MAWTS-1 courseware and TACMAN.

e. Flight and Simulator Event Training (2 Events, 4.0 Hours)

ALZ-260 2.0 T,SC,R 1 KC-130J A

Goal. Introduce and Qualify the Crew Chief in day ALZ operations. Maintain proficiency for ALZ Crew Member.

Requirement. The Crew Chief will demonstrate the ability to prepare the cargo compartment and aircraft exterior for ALZ operations, and lookout doctrine to include directing the pilot in an aircraft reverse taxi maneuver.

Performance Standard. Per the NFM, KC-130 TACMAN and TTP (AS REQUIRED).

Prerequisite. N/A

Ordnance. N/A

External Syllabus Support. USMC MMT, MWSS EAF or USAF Combat Control Team with appropriate expeditionary airfield ALZ Marking/lighting and Crash/Fire/Rescue Support.

ALZ-261 2.0 T,SC 1 KC-130J A NS

Goal. Introduce and qualify the Crew Chief in NS ALZ operation. Maintain proficiency for NS ALZ Crew Member

Requirement. The Crew Chief will demonstrate the ability to prepare the cargo compartment and aircraft exterior for ALZ operations, and lookout doctrine to include directing the pilot in an aircraft reverse taxi maneuver while utilizing NVDs. An NSI is required with a NON-NSQ crewmember. Missions utilizing NVDs shall be annotated as a RQD-661.

Performance Standard. Per the NFM, KC-130 TACMAN, and OPNAVINST 3710.7_.

Prerequisite. ALZ-260, (NS-203), (NS-204).

Ordnance. N/A

External Syllabus Support. USMC MMT, MWSS EAF or USAF Combat Control Team with appropriate expeditionary airfield ALZ

Marking/lighting and Crash/Fire/Rescue Support.

ALZ-263 2.0 T,SC,R 1 KC-130J A (N) (NS)

Goal. Qualify the Crew Chief in Engine Running Offload/On-load procedures, or to maintain proficiency in ERO for ERO qualified crewmember.

Requirement. The Crew Chief will demonstrate the ability to prepare the cargo compartment for ALZ operations and safely and expeditiously conduct an Engine Running Offload/On-load of 19 Passengers and a maximum of 1500 lbs of cargo, and direct the pilot in an aircraft reverse taxi maneuver. An NSI is required with a NON-NSQ crewmember.

Performance Standard. Satisfactorily complete the procedures per the NFM and KC-130 TACMAN.

Prerequisite. NS 203 or 204 if LLL when using NVDs.

Ordnance. N/A

External Syllabus Support. USMC MMT, MWSS EAF or USAF Combat Control Team with appropriate expeditionary airfield ALZ Marking/lighting and Crash/Fire/Rescue Support.

8. Rapid Ground Refueling (RGR)

a. Purpose. Qualify the crewmember, or to maintain proficiency for planning, loading the required equipment, set up, and conduct a day rapid ground refueling for either rotary or fixed-wing aircraft.

b. General. This phase of training shall be conducted with a qualified instructor (CCI or LMI). An NSI is required with a NON-NSQ crewmember.

c. Crew Requirements. PF, PM, CC and LMs as required for RGR site.

d. Ground/Academic Training. Review KC-130 TACMAN RGR procedures and MAWTS-1 ASP RGR courseware. Complete a class that includes but is not limited to a review of hand and arm signals, defense of site, flight operations around site, and crew responsibilities/CRM on the ground.

e. Ground and Simulator Event Training (2 Events, 2.0 Hours)

RGR-270 1.0 T,SC,R 1 KC-130J A

Goal. Practice or maintain currency in RGR point man duties during daytime with either rotary / fixed-wing aircraft or tactical vehicles.

Requirement. The crewmember will assist the refueling supervisor in the conduct of a day RGR, minimum 2 point setup, including an actual transfer of fuel to either rotary-wing / fixed-wing aircraft or tactical vehicles. Instruction will be given on inspection and configuration of all associated gear, normal procedures, safety, and breakdown of the system. The crewmember will man, and perform all duties associated with manning, a refueling point during the fuel transfer portion(s) of the RGR evolution. Additionally, discuss RGR location, security, setup,

pre/post-stage areas and emergencies. EMCON procedures are optional. Emphasize aircraft systems operation and fault isolation.

Performance Standard. Satisfactorily complete the procedures per NFM and KC-130 TACMAN.

Prerequisite.

Ordnance. N/A

External Syllabus Support. Crash/Fire/Rescue Support. Rotary-wing, tilt rotor, fixed-wing or ground vehicle (as appropriate).

RGR-271 1.0 T,SC 1 KC-130J A N (NS)

Goal. Introduce, qualify and maintain currency of RGR point man duties, during a night evolution refueling either rotary or fixed-wing aircraft with or without use of night vision devices.

Requirement. The crewmember will assist the refueling supervisor in the conduct of a night RGR, minimum 2 point setup, including an actual transfer of fuel to either rotary-wing or fixed-wing aircraft. Instruction will be given on inspection and configuration of all associated gear, normal procedures, safety, and breakdown of the system. The crewmember will man, and perform all duties associated with manning, a refueling point during the fuel transfer portion(s) of the RGR evolution. Special emphasis will be placed on hazards of this mission at night. Crewmember will demonstrate a thorough knowledge of night vision devices. Additionally, discuss RGR location, security, setup, pre/post-stage areas and emergencies. EMCON procedures are optional. Missions utilizing NVDs shall be annotated as a RQD-671

Performance Standard. Satisfactorily complete the procedures per NFM and KC-130 TACMAN.

Prerequisite. RGR-270 DAY, (NS-203),(NS-204)

Ordnance. N/A

External Syllabus Support. Crash/Fire/Rescue Support. Rotary-wing, tilt rotor, fixed-wing or ground vehicle (as appropriate).

233. CORE SKILL ADVANCED TRAINING

1. General. Upon completion of this level, the Crew Chief will be , proficient in LAT (TACNAV)low level, Assault Landing Zone operations, basic aerial delivery procedures and Defensive Tactics against a surface-based threats THRX(R).

a. The purpose of this phase of training is to provide a combat qualified Crew Chief. Crew Chief receiving initial training shall be instructed by either current Crew Chief Instructors (RQD-617), or WTIs (RQD-653) when required.

2. Tactical Navigation (TACNAV)

a. Purpose. Qualify the Crew Chief, or to maintain proficiency for the LAT qualified Crewmember, in both day and night LAT in the unique tasks and

requirements associated with low altitude tactics flights in a low to medium ground threat environment.

b. General. LAT rules of conduct are contained in Aviation T&R Program Manual, and KC-130 TACMAN. All LAT sorties require all crew members to be LAT qualified and proficient. If a Crew Chief is not qualified and/or proficient, then a Crew Chief Instructor will accompany the flight. The LAT qualification requirements consists of TACNAV-321, and 322

(1) This phase of instruction may be taught locally PER the MAWTS-1 ASP, or in conjunction with AATTC by a qualified Instructor (CCI).

(3) Low altitude flight currency restrictions contained within T&R Program Manual, do not apply to this crew position.

c. Crew Requirements. PF, PM, ACS, and two observers.

d. Ground/Academic Training. Per the MAWTS-1 Course Catalog. Complete MAWTS-1 ASE courseware for LAT and review KC-130 TACMAN or published TTP as appropriate.

f. Flight and Simulator Event Training (2 Events, 4.0 Hours)

TACNAV-323 2.0 T,SC,R 1 KC-130J A

Goal. Introduce and qualify the Crewmember, or to maintain proficiency for the LAT qualified Crewmember, in the duties of an aft lookout doctrine during a low altitude tactics mission.

Requirement. The Crewmember will perform the duties of an aft lookout during a low altitude tactics mission. Emphasis will be placed on cargo compartment preparation, crew briefing, lookout doctrine, scan for threats, crew coordination and combat entry/exit checklists. This event may include air-to-air refueling, aerial delivery or any type of air/land delivery.

Performance Standard. Per the NFM and KC-130 TACMAN.

Prerequisite. TACNAV-223.

Ordnance. N/A

External Syllabus Support. Scheduled appropriate LAT approved course.

TACNAV-324 2.0 T,SC,R 1 KC-130J A NS

Goal. Introduce and qualify the Crewmember, or to maintain proficiency for the LAT qualified Crewmember, in the duties of an aft lookout doctrine during a low altitude tactics mission while utilizing NVDs.

Requirement. The Crewmember will perform the duties of an aft lookout during a Low Altitude Tactics mission. Emphasis will be placed on cargo compartment preparation, crew briefing, lookout doctrine, scan for threats, crew coordination and combat entry/exit checklists while utilizing NVDs. This event may include air-to-air refueling, aerial delivery or any type of

air/land delivery.

Performance Standard. Successful completion of procedures Per the NFM, KC-130 TACMAN, applicable TTP's (AS REQUIRED) and OPNAVINST 3710.7_.

Prerequisite. TACNAV-223,TACNAV-224,TACNAV-323, RQD-694.

Ordnance. N/A

External Syllabus Support. Scheduled appropriate LAT approved course.

3. Threat Reaction (Radar) (THRX(R))

a. Purpose. Qualify the Crew Chief in the coordinated use of defensive maneuvering and the Aircraft Survivability Suite (ASE) against surface-to-air threat systems.

b. General Qualify the Crewmember, or to maintain proficiency for the DEFTAC qualified Crewmember, in the unique tasks and requirements associated with defensive tactics flights in a low to medium air threat environment. This phase of instruction may be taught locally utilizing the MAWTS-1 ASP, or in conjunction with AATTC, by a qualified Instructor.

c. Crew Requirements. PF, PM, ACS, and two observers.

d. Ground/Academic Training. Prior to THRX(R)-340, the Crew Chief shall review pertinent chapters in the KC-130 TACMAN and receive:

(1) MAWTS-1 ASP course on Tactical Aircrew Coordination.

(2) MAWTS-1 ASP course on MAGTF Ground Based Air Defense System (GBADS).

(3) MAWTS-1 ASP course on KC-130 Specific Threat Counter-Tactics.

(4) Specific training on installed KC-130J ASE equipment.

(5) Complete THRX(I)-240

e. Flight and Simulator Event Training (1 Events, 3.0 Hours)

THRX(R)-340 3.0 T,SC,R E 1 KC-130J A (N) (NS)

Goal. Qualify the Crewmember, or to maintain proficiency for the THRX(R)/ASE qualified Crewmember, in the duties of an aft lookout during a flight utilizing aircraft survivability equipment in a ground threat environment.

Requirement. The Crewmember will perform the duties of an aft lookout during a flight involving the use of ASE. Emphasis will be placed on cargo compartment preparation, crew briefing, lookout doctrine, scanning for ground/air threats and terrain clearance, crew coordination, combat entry/exit checklists, and systems familiarity. This event may include escorts.

Performance Standard. Per the MAWTS-1 ASP, NFM, KC-130 TACMAN, and TTP (AS REQUIRED).

Prerequisite. TACNAV-323.

Ordnance. 300 RR-129/RR-144 Chaff.

External Syllabus Requirement. EW range or threat emitters.

4. Rapid Ground Refueling

a. Purpose. Qualify the Crew Chief, or to maintain proficiency for the RGR Refueling Supervisor qualified Crew Chief, to plan, pre-flight the required equipment, brief, set up, and conduct a rapid ground refueling for either rotary/fixed-wing/tilt rotor aircraft, tactical vehicles, or tactical fuel dispensing systems.

b. General. A qualified Instructor shall conduct this phase of training. All NVS flights shall be flown with an NSI.

c. Ground Training. Prior to flight training, instruction shall be conducted PER the MAWTS-1 ASP for RGR and Taxi Director ASP.

d. Flight Training (0 Flights, 2.0 Hours)

RGR-370 1.0 T,SC 1 KC-130 A

Goal. Qualify the Crew Chief, or to maintain proficiency for the RGR RS qualified Crew Chief, in RGR procedures during a day evolution refueling either rotary/fixed-wing/tilt rotor aircraft, tactical vehicles, or tactical fuel dispensing systems.

Requirement. The crewmember, under the supervision of a qualified Instructor, will plan, brief, and execute a daytime RGR, minimum 2 point setup, including an actual transfer of fuel to either rotary-wing, fixed-wing , tilt rotor aircraft or tactical vehicles. The crewmember will demonstrate thorough knowledge of planning an RGR site, briefing, emergency procedures, inspection and configuration of all associated gear, normal procedures, safety, markings, and breakdown of the system. The crewmember will perform all duties associated with those of the Refueling Supervisor (RS).

Performance Standard. Satisfactory completion of the procedures per the NFM, KC-130 TACMAN/ANTTP

Prerequisites. RGR 270

Ordnance. N/A

External Syllabus Support. Crash/Fire/Rescue Support. Rotary-wing, tilt rotor, fixed-wing or ground vehicle (as appropriate).

RGR-371 1.0 T,SC,R, E 1 KC-130 A NS

Goal. Qualify the Crew Chief, or to maintain proficiency for the RGR RS qualified Crew Chief, in RGR procedures during a night evolution with use of NVS, refueling either fixed/rotary-wing/tilt rotor aircraft, tactical vehicles, or tactical fuel dispensing systems.

Requirement. The crewmember, under the supervision of a qualified Instructor, will plan, brief, and execute a night RGR with use of NVS, minimum 2 point setup, including an actual transfer of fuel to either rotary-wing/fixed-wing/tilt rotor aircraft, or tactical vehicles. The crewmember will demonstrate thorough knowledge of planning an RGR site, briefing, emergency procedures, inspection and configuration of all associated gear, normal procedures, safety, lighting, and breakdown of the system. The crewmember will perform all duties associated with those of the Refueling Supervisor (RS).

Performance Standard. Satisfactory completion of the procedures per the NFM, KC-130 TACMAN / ANTTP

Prerequisite. RGR 270, 271, 370

Ordnance.

External Syllabus Support. Crash/Fire/Rescue Support. Rotary-wing, tilt rotor, fixed-wing or ground vehicle (as appropriate).

5. Air Delivery

a. Purpose. Qualify the Crew Chief, or to maintain proficiency for the AD qualified Crewmember, in both day and night AD in the unique tasks and requirements associated with AD flights.

b. General. This sortie is to further familiarize the Crew Chief in NVD while on an AD mission. In the case whereas a Crew Chief is assigned to this flight, this code will be used to familiarize the Crew Chief with the conduct of this flight.

c. Crew Requirements. PF, PM, ACS, CC and 2 LM minimum.

d. Ground/Academic Training. Review NFM, KC-130 TACMAN, and MAWTS-1 AD courseware information regarding personnel and cargo delivery procedures.

e. Flight and Simulator Event Training (1 Events, 1.0 Hours)

AD-380 1.0 T,C,SC,R 1 KC-130J A (N) (NS)

Goal. Introduce, qualify and maintain proficiency for the Crew Chief in Aerial delivery safety duties during day or night AD mission.

Requirement. The Crew Chief will be introduced to the airdrop checklists and the duties of an aft observer. Emphasis will be placed on the safety of conduct during the Aerial Delivery during day and night missions. This flight code is for familiarization only. The Crew Chief is not essential for this mission.

Performance Standard. Satisfactorily complete procedures per NFM, KC-130 TACMAN, and MCCRES standards.

Prerequisite. RQD-694 if using NVDs.

Ordnance.

External Syllabus Requirement. Air delivery platoon for cargo rigging inspection and DZ control.

234. CORE PLUS TRAINING

1. General. Upon completion of this level, the Crew Chief will be proficient in defensive tactics against an air-based threat and be a Core Plus qualified Crew Chief.

a. Crew Chiefs receiving initial training shall be instructed by either a current Squadron Stage Instructor, DEFTACI, NSI or WTI (as required). Once they have completed the initial event, subsequent events may be flown with proficient aircrew.

b. Crew Chiefs conducting NS training shall be instructed by an NSI or a NSQ(H) TPC as long as the FAG is NSQ(B) and the prerequisites for the event are met.

2. Defensive Tactics (DEFTAC).

a. Purpose. Introduce defensive tactics utilized in air-to-air engagements by combining maneuvering and use of the ASE suite. Emphasis will be placed on lookout doctrine and use of the Rear Vision Device (RVD).

b. General. The DEFTAC qualification requirements consist of DEFTAC-440 and DEFTAC-441.

(1) Aircraft must have fully operational ASE suite.

(2) Appropriate Chaff and Decoy Flares must be loaded prior to flight.

c. Crew Requirements. PF, PM, ACS, and two observers.

d. Ground/Academic Training. Academic prerequisites Per MAWTS-1 KC-130J Defensive Tactics Course. Prior to DEFTAC-440, the Crew Chief shall receive:

(1) This phase of instruction may be taught locally utilizing the MAWTS-1 ASP, or in conjunction with AATTC, by a qualified Instructor (CCI) or (WTI).

(2) MAWTS-1 ASP course on Tactical Aircrew Coordination.

(3) MAWTS-1 ASP course on MAGTF Ground Based Air Defense System (GBADS).

(4) MAWTS-1 ASP course on KC-130 Specific Threat Counter-Tactics.

(5) Specific training on installed KC-130J ASE equipment.

e. Flight and Simulator Event Training (2 Events, 2.0 Hours)

DEFTAC-440 1.0 T,SC,R 1 KC-130J, 1 Adversary A (NS)

Goal. Introduce and qualify the Crewmember, or to maintain proficiency for the DEFTAC qualified Crewmember, in the duties of an aft lookout or rear vision device lookout during a defensive tactics mission maneuvering relative to a single air threat.

Requirement. The Crewmember will perform the duties of an aft lookout or rear vision device lookout during a flight involving the use of defensive tactics. Emphasis will be placed on cargo compartment preparation, crew briefing, lookout doctrine, scan for air threats and terrain clearance, crew coordination and combat entry/exit checklists. This event may include escorts.

Performance Standard. Per the NFM and KC-130 TACMAN.

Prerequisite. TACNAV-323

Ordnance. Full Chaff and Decoy Flare load.

External Syllabus Support. Appropriate aggressor aircraft.

DEFTAC-441 1.0 T,SC 1 KC-130J, 2 Adversaries A (NS)

Goal. Introduce and qualify the Crewmember, or to maintain proficiency for the DEFTAC qualified Crewmember, in the duties of an aft lookout or rear vision device lookout during a defensive tactics mission maneuvering relative to a multiple air threat.

Requirement. The Crewmember will perform the duties of an aft lookout or rear vision device lookout during a flight involving the use of defensive tactics. Emphasis will be placed on cargo compartment preparation, crew briefing, lookout doctrine, scan for air threats and terrain clearance, crew coordination and combat entry/exit checklists. This event may include escorts.

Performance Standard. Per the NFM and KC-130 TACMAN.

Prerequisite. DEFTAC-440.

Ordnance. Full Chaff and Decoy Flare load.

External Syllabus Support. Appropriate aggressor aircraft.

240. SQUADRON STAGE INSTRUCTOR TRAINING.

1. General. Qualify the Crew Chief as a Squadron Stage Crew Chief Instructor. Stage instructors will instruct the syllabus at the operational squadron. At the completion of this phase, the Instructor-Under-Training (IUT) will be a NATOPS qualified CCI, designated a Crew Chief Instructor (CCI) (RQD-617), and a designation letter by the Commanding Officer will be placed in the individuals NATOPS Jacket.

2. Squadron Stage Instructor Training.

a. Purpose. Qualify the Crew Chief as a Squadron Stage Crew Chief Instructor. Stage instructors will instruct the syllabus at the operational

squadron. At the completion of this phase, the Instructor-Under-Training (IUT) will be a NATOPS qualified CCI, designated a Crew Chief Instructor (CCI) (RQD-617), and a designation letter by the Commanding Officer will be placed in the individuals NATOPS Jacket.

b. General.

c. Crew Requirements. CC IUT and a qualified Instruct

d. Ground/Academic Training. N/A.

e. Flight and Simulator Event Training (2 Events, 6.0 Hours)

IUT-501 3.0 E 1 KC-130J A

Goal. Train Crew Chief IUT.

Requirement. IUT will demonstrate the ability to instruct evaluate a student Crew Chief in all facets of the duties of a Crew Chief on the KC-130J. The IUT will also demonstrate the ability to correct common student errors as simulated by a Crew Chief NATOPS Instructor. The IUT will also apply standardized instructional techniques.

Performance Standard. IAW NFM.

Prerequisite. Crew Chief III. 750 hours Aircraft Type.

IUT-502 3.0 E 1 KC-130J A

Goal. Train Crew Chief IUT.

Requirement. IUT will conduct training for a student Crew Chief under the supervision of a qualified NI/ANI Applying the standardized instructional techniques.

Performance Standard. IAW NFM.

Prerequisite. IUT-501, Crew Chief 3.

IUT-503 3.0 E 1 GFT/CPT/OFT S A

Goal. Familiarize the instructor under training in the proper operation of the device trainers.

Requirement. Instruct IUT on proper set-up and safe operation of device trainer.

Performance Standard. IAW NFM and operators manual.

Prerequisite. IUT-501 and IUT-502, Crew Chief 3.

External Syllabus Support. WST simulator, CAPPT or device trainer and applicable Instructor.

250. REQUIREMENTS, QUALIFICATIONS AND DESIGNATIONS (RQD)

1. General

a. ?E?-coded sorties are evaluation sorties. ?E?-coded sorties in the 600-level phase may be logged in conjunction with any sortie that completes its stage. For example, RQD-635 may be flown in conjunction with DACMG-363. CRP is not awarded for these 600-level sorties; however, CRP credit may be obtained by logging the appropriate training code(s) in the 200-400 level syllabus. Once the flight to attain the qualification/designation is complete, a letter from the squadron Commanding Officer awarding the qualification/designation shall be placed in the NATOPS and APR before that qualification/designation can be utilized.

b. After the Commanding Officer has designated the CCUI in writing as a Crew Chief I or a Crew Chief II, the operations department shall log RQD-612 (Crew Chief I) and RQD-613 (Crew Chief II) respectively.

2. Administrative and Maintenance

a. Purpose. Maintain currency for the Crewmember on any benign missions.

b. General. N/A

c. Crew Requirements. Standard crew per NFM.

d. Ground/Academic Training. N/A

e. Flight and Simulator Event Training (1 Events, 4.0 Hours)

RQD-600 4.0 1 KC-130J A (N)

Goal. Maintain proficiency in normal and emergency procedures during day or night un-aided flight operations. Review ACAWS's and operation of CNI-MU, ECB's and AMU to troubleshoot and perform in-flight fault isolation.

Requirement. Review normal and emergency procedures during day or night un-aided flight operations per current instructions.

Performance Standard. Per NFM.

3. Systems Review

a. Purpose. Review aircraft systems, systems operation, system malfunctions, corrective actions, fault isolation and in flight fault isolation per current instructions.

b. General. Instructor Crew Chief may induce malfunctions and simulated emergencies as practical with coordination of the Pilot In Command.

c. Crew Requirements. Standard crew per NFM.

d. Ground/Academic Training.

e. Flight and Simulator Event Training (8 Events, 32.0 Hours)

RQD-601 4.0 T,SC 1 KC-130J A

Goal. Review preflight, post-flight, and turnaround procedures.

Requirement. Review the Crew Chief's responsibilities/duties, crew coordination, and aircraft limitations that are associated with the expanded preflight, post-flight, and turnaround procedures to include GMS and PMA proficiency. Operate CNI-MU, perform TOLD computations and refine preflight duties on the AMU.

Performance Standards. Upon completion there are no re-fly requirements. The Crewmember will be able to perform the expanded checklist, from the preflight checklist to the post-flight and turnaround checklists observing all aircraft limitations, his/her responsibilities/duties, and crew coordination with assistance as necessary from the instructor.

Prerequisite. CC 1 (RQD-690)

RQD-602 4.0 T,SC 1 KC-130J A

Goal. Review propulsion system.

Requirements. Review propulsion system, to include engine theory of operation, propeller operation, split turbine theory, reduction gearbox assembly. Review associated ACAWS and operation of hard and soft panels on the CNI-MU that is associated with this system.

Performance Standards. Upon completion there are no re-fly requirements. The Crew Chief will be knowledgeable on aircraft propulsion system operation, possible malfunctions, fault isolation, and corrective actions per current instruction.

Prerequisite. CC 1 (RQD-690)

RQD-603 4.0 T,SC 1 KC-130J A

Goal. Review the aircraft AC and DC electrical systems.

Requirement. Review the aircraft AC and DC electrical systems including the primary and secondary systems, DC system, indicators, and system warning lights. Review associated ACAWS and operation of hard and soft panels on the CNI-MU that is associated with this system.

Performance Standards. Upon completion there are no re-fly requirements. The Crew Chief will be knowledgeable on aircraft AC and DC electrical system operations, possible malfunctions, fault isolation, and corrective actions per current instruction.

Prerequisite. CC 1 (RQD-690)

RQD-604 4.0 T,SC 1 KC-130J A

Goal. Review the aircraft bleed air systems, anti-icing and deicing systems.

Requirement. Review the aircraft bleed air systems to include the associated bleed air valves & ducting, bleed air systems control,

isolation valves, wing and empennage anti-icing, propeller anti-icing/de-icing, and NESA system. Review associated ACAWS and operation of hard and soft panels on the CNI-MU that is associated with this system.

Performance Standards. Upon completion there are no re-fly requirements. The Crew Chief will be knowledgeable on aircraft bleed air and anti-icing/de-icing system operations, possible malfunctions, fault isolation, and corrective actions per current instruction.

Prerequisite. CC 1 (RQD-690)

RQD-605 4.0 T,SC 1 KC-130J A

Goal. Review the aircraft fuel systems.

Requirement. Review the aircraft fuel system. Include the refueling/defueling system, procedures, tank construction, the water removal system, cross feed, fuel transfer & jettison, single point refueling systems, fuel systems controls, and the fuel indicating system. Review associated ACAWS and operation of hard and soft panels on the CNI-MU that is associated with this system.

Performance Standards. Upon completion there are no re-fly requirements. The Crew Chief will be knowledgeable on aircraft fuel system operation, possible malfunctions, fault isolation, and corrective actions per current instruction.

Prerequisite. CC 1 (RQD-690)

RQD-606 4.0 T,SC 1 KC-130J A

Goal. Review the aircraft utility, booster, and auxiliary hydraulic systems.

Requirement. Review the aircraft utility, booster, and auxiliary hydraulic systems. Include the basic hydraulic system and sub systems, flight controls, landing gear, flaps, normal wheel-brakes, nose-wheel steering, emergency brakes, ramp and aft cargo door, and the emergency nose-wheel extension. Review associated ACAWS and operation of hard and soft panels on the CNI-MU that is associated with this system.

Performance Standards. Upon completion there are no re-fly requirements. The Crew Chief will be knowledgeable on aircraft utility, booster, and auxiliary hydraulic system operation, possible malfunctions, fault isolation, and corrective actions per current instruction.

Prerequisite. CC 1 (RQD-690)

RQD-607 4.0 T,SC, 1 KC-130J A

Goal. Review the aircraft pressurization and oxygen systems.

Requirement. Review the aircraft pressurization and oxygen systems. Include the flight station/cargo compartment air

conditioning systems, outflow valve, safety valve, cabin pressure controller, air conditioning control panel, and the oxygen system. Perform LOX servicing IAW Job Guide. Review associated ACAWS and operation of hard and soft panels on the CNI-MU that is associated with this system.

Performance Standards. Upon completion there are no re-fly requirements. The Crew Chief will be knowledgeable on aircraft pressurization and oxygen system operation, possible malfunctions, fault isolation, and corrective actions per current instruction. Service LOX IAW applicable Job Guides.

Prerequisite. CC 1 (RQD-690)

RQD-608 4.0 T,SC 1 KC-130J A

Goal. Review the aircraft communications and navigation systems.

Requirement. Review the aircraft communications and navigation systems. Include radio operation/transmission. Review associated ACAWS and operation of hard and soft panels on the CNI-MU/AMU that is associated with this system.

Performance Standards. Upon completion there are no re-fly requirements. The Crew Chief will be knowledgeable on aircraft communication and navigation systems as well as operation, possible malfunctions, fault isolation, and corrective actions per current instruction.

Prerequisite. CC 1 (RQD-690)

4. Engine Run/Taxi qualifications

a. Purpose. Train Crew Chief in engine runs, and taxi procedures. This stage does not require flight time, but does require the use of a KC-130J aircraft for the indicate time, hence the events are coded as “S” events. RQD 610 and 611 are to be completed at the discretion of the Commanding Officer.

b. General.

c. Crew Requirements. CCUI and qualified Instructor.

d. Ground/Academic Training. The student will be familiar with the squadron sop and the local course rules.

e. Flight and Simulator Event Training (4 Events, 10.0 Hours)

RQD-609 4.0 T,SC 1 KC-130J A

Goal. Introduce Engine run procedures.

Requirement. NATOPS Instructor will introduce engine ground runs in accordance with current NAVAIR Tech Pubs and Job Guide instruction. Start engine run syllabus IAW with local DSS procedures.

Performance Standard. IAW applicable MIMs, NFM, and local course rules.

Prerequisite. CC 3 (RQD-692)

RQD-610 4.0 T,SC E 1 KC-130J A

Goal. Evaluate Student Crewmember on engine run procedures.

Requirement. NATOPS Instructor/Evaluator will evaluate Student Crewmember engine run procedures

Performance Standard. Qualified per MIMS, NFM, and local course rules and DSS program.

Prerequisite. RQD-609.

Prerequisite. CC 3 (RQD-692), RQD-609.

RQD-611 1.0 T,SC 1 KC-130J A

Goal. Introduce taxi procedures.

Requirement. NATOPS Crew Chief Instructor will introduce ground taxi in accordance with local DSS procedures.

Performance Standard. IAW NFM, 3710.7_, and local course rules.

Prerequisite. CC 3 (RQD-692)

RQD-612 1.0 T,SC,E 1 KC-130J A

Goal. Evaluate Student Crew Chief on taxi procedures.

Requirement. NATOPS Pilot Instructor/Evaluator will evaluate Student Crewmember taxi procedures

Performance Standard. Qualified per NFM, 3710.7_ and local course rules.

Prerequisite. CC 3 (RQD-692), RQD-611.

5. Search and Rescue (SAR)

a. Purpose. Qualify the Crewmember on search and rescue missions.

b. General. Standardization will be emphasized throughout Instructor training. IUT must have a minimum of 1000 hours in type model and 125 hours in type series.

c. Crew Requirements. Standard crew as per NFM.

d. Ground/Academic Training. N/A

e. Flight and Simulator Event Training (1 Events, 2.0 Hours)

RQD-616 2.0 T,SC 1 KC-130 A (N) (NS)

Goal. Introduce and track the Crewmember in search and rescue missions.

Requirement. The Crewmember will perform all duties on a search and rescue mission. Emphasis will be placed on search and rescue techniques, in-flight deployment of the URU-13 life raft, and other duties as may be directed by plane commander.

Performance Standard. PER the TACMAN.

6. NVD Aerial Refueling Tracking Code

a. Purpose. To provide tracking code for Night Systems Aerial Refueling.

b. General. Standardization will be emphasized throughout Instructor training. IUT must have a minimum of 1000 hours in type model and 125 hours in type series.

c. Crew Requirements. N/A

d. Ground/Academic Training. The student will have completed MAWTS-1 ASP, Ground instruction, NITE lab and AR-251.

e. Flight and Simulator Event Training (1 Event, 2.0 Hours)

RQD-650 0.0 NS

Goal. Introduce and track the Crewmember in Night System Low Speed Aerial Refueling missions.

Requirement. The Crewmember will perform all duties on a Aerial Refueling mission utilizing NVDs. Emphasis will be placed on Aerial Refueling techniques and other duties as may be directed by the plane commander.

Performance Standard. Satisfactory completion of the procedures per the NFM, AR Manual, and KC-130 TACMAN.

Prerequisite. MAWTS-1 ASP, Ground instruction, NITE lab and AR-251.

RQD-651 0.0 NS

Goal. Introduce and track the Crewmember in Night System High Speed Aerial Refueling missions.

Requirement. The Crewmember will perform all duties on a Aerial Refueling mission utilizing NVDs. Emphasis will be placed on Aerial Refueling techniques and other duties as may be directed by the plane commander.

Performance Standard. Satisfactory completion of the procedures per the NFM, AR Manual, and KC-130 TACMAN.

Prerequisite. MAWTS-1 ASP, Ground instruction, NITE lab and AR-252.

7. NVD ALZ Tracking Code

c. Purpose. To provide tracking code for Night Systems Assault landing zone missions.

b. General. Standardization will be emphasized throughout Instructor training. IUT must have a minimum of 1000 hours in type model and 125 hours in type series.

c. Crew Requirements. N/A

d. Ground/Academic Training. MAWTS-1 ASP, Ground instruction, NITE lab and AR-251.

e. Flight and Simulator Event Training (1 Events, 2.0 Hours)

RQD-661 0.0 NS

Goal. Track the Crewmember in Night System Assault Landing Zone Missions.

Requirement. The Crewmember will perform all duties on a Assault Landing Zone Mission utilizing NVDs. Emphasis will be placed on Assault Landing Zone techniques and other duties as may be directed by the plane commander.

Performance Standard. Satisfactory completion of the procedures per the NFM, and KC-130 TACMAN.

Prerequisite. MAWTS-1 ASP, Ground instruction, NITE lab and ALZ-260.

8. Rapid Ground Refueling Codes

a. Purpose. To provide code for Rapid Ground Refueling mission and Refueling Supervisor (RS).

b. General. Standardization will be emphasized throughout Instructor training. IUT must have a minimum of 1000 hours in type model and 125 hours in type series.

c. Crew Requirements. PF, PM, CC and LMs as required for RGR site.

d. Ground/Academic Training. The student will be familiar with the TACMAN procedures and associated MAWTS-1 courseware.

b. Flight and Simulator Event Training (2 Events, 2.0 Hours)

RQD-670 0.0

Goal. Track the Crewmember Qualification for RGR Refueling Supervisor (RS).

Requirement. The Crewmember will perform all duties on a Rapid Ground Refueling mission as the Refueling Supervisor (RS). Emphasis will be placed on Rapid Ground Refueling techniques, Refueling Supervisor (RS) procedures and responsibilities and other duties as may be directed by the RASO.

Performance Standard. Satisfactory completion of the procedures per the NFM, and KC-130 TACMAN.

Prerequisite. MAWTS-1 ASP, Ground instruction, RGR-270, RGR-271, RGR-370 and RGR-371

RQD-671 1.0 NS

Goal. Track the Crewmember in Night System Rapid Ground Refueling missions and point man if applicable.

Requirement. The Crewmember will perform all duties on a Rapid Ground Refueling mission utilizing NVDs. Emphasis will be placed on Rapid Ground Refueling techniques, point man procedures and responsibilities and other duties as may be directed by the plane commander, to include but not limited to system operation as needed for fault isolation and load shedding in a operational environment.

Performance Standard. Satisfactory completion of the procedures per the NFM, and KC-130 TACMAN.

Prerequisite. MAWTS-1 ASP, Ground instruction, NITE lab and RGR-270.

9. Functional Check Flight

a. Purpose. Continue instruction and maintain proficiency in functional check flight procedures. Perform all FCF procedures IAW NATOPS.

b. General. Standardization will be emphasized throughout Instructor training. IUT must have a minimum of 1000 hours in type model and 125 hours in type series.

c. Crew Requirements. Standard crew per NFM.

d. Ground/Academic Training. The student will be familiar with the FCF procedures.

e. Flight and Simulator Event Training (2 Events, 6.0 Hours)

b. Flight and Simulator Event Training (1 Events, 4.0 Hours)

RQD-680 4.0 1 KC-130J A

Goal. Introduce, qualify and maintain currency for the Crew Chief proficiency in functional check flight procedures.

Requirement. Conduct an engine run and flight phase inspection upon completion of post maintenance discrepancies. The flight shall include the shutdown and air-start of at least one engine.

Performance Standard. Satisfactorily execute procedures per the NFM, OPNAVINST 3710.7_, and OPNNAVINST 4790.2_.

Prerequisites. CC 2 (RQD-691)

10. Crew Chief Evaluation and Annual NATOPS Check.

a. Purpose. Conduct an initial or annual NATOPS check.

b. General. The student will perform to the standards of the NFM.

c. Crew Requirements. Standard crew as per NFM.

d. Ground/Academic Training. N/A

e. Flight and Simulator Event Training (3 Events, 12.0 Hours)

RQD-690 4.0 T,SC,E 1 KC-130J A (N)

Goal. CC-I NATOPS evaluation.

Requirement. NATOPS Instructor/Evaluator will evaluate Crew Chief per NATOPS and TACMAN procedures. It is preferred that this training be done on a AR, LL, ALZ, RGR, or combination mission, and remain overnight (RON) flight.

Performance Standard. Per NFM and TACMAN.

Prerequisites. FAM 100 through RGR-170 codes complete. Crew Chief I evaluation will be conducted upon completion of the CCUI Training Syllabus.

RQD-691 4.0 T,SC E 1 KC-130J A (N) (NS)

Goal. CC-II NATOPS evaluation.

Requirement. NATOPS Instructor/Evaluator will evaluate Crew Chief per NATOPS and TACMAN procedures. It is preferred that this training be done as an AR, LL, ALZ, RGR, or combination mission, and remain overnight (RON) flight.

Performance Standard. Per NFM, TACMAN, OPNAVINST 4790 and applicable MIMs.

Prerequisites. NVG-203 through RGR-281, SYS-600 through 607, RQD-690 and Plane Captain Syllabi complete . Crew Chief II evaluation will be conducted upon completion of the CC-II Training Syllabus.

RQD-692 6.0 T,SC E 1 KC-130J A (N) (NS)

Goal. Crew Chief III NATOPS evaluation.

Requirement. NATOPS Evaluator/Assistant NATOPS Instructor shall evaluate the Crew Chief for NATOPS procedures. This flight should be conducted in conjunction with an Overnight Flight (RON).

Performance Standard. Per NFM, TACMAN, OPNAVISNT 4790, OPNAVINST 3710.7_ , local course rules and applicable MIMs.

Prerequisite. 300 codes complete, RQD-609 through RQD-613 complete and must be asterisk level 3 in all of the 6276 MOS MATMEP.

13. Squadron Stage Instructor

a. Purpose. To qualify the Crew Chief as a Squadron Stage Crew Chief Instructor and provide tracking codes for Instructor designations.

b. Flight and Simulator Event Training (1 Events, 4.0 Hours)

RQD-693 2.0 T, E 1 KC-130J A (N) (NS)

Goal. Tracking code for the Crew Chief Instructor (CCI).

Requirement. IUT will demonstrate the ability to evaluate a Student Crew Chief in all facets of the duties of a Crew Chief on the KC-130J. The IUT will also demonstrate the ability to correct common student errors as simulated by a Crew Chief NATOPS Instructor. The IUT will also apply standardized instructional techniques.

Performance Standard. IAW NFM and TACMAN.

Prerequisite. IUT-501 through IUT-503.

14. Night Systems Qualification (NSQ)

a. Purpose. NSQ qualification.

b. General. Crew Chief receiving instruction leading to NSQ in the KC-130J will be qualified in the equivalent day sortie.

(1) An NSI crewmember shall conducted this phase of instruction.
(2) NVG time logged as part of nite lab will count towards NSQ qualification.

c. Crew Requirements. Standard as per NFM

d. Ground/Academic Training. Ground Training. MAWTS-1 NVD ASP courses and NITE lab (includes Night Vision Systems, N.S. Human Factors and Night Environment ASPs).

e. Flight and Simulator Event Training (2 Events, 4.0 Hours)

RQD-694 2.0 T E KC-130J A NS

Goal. Qualify the Crew Chief in flights involving the utilization of Night Vision Devices in the high altitude regime(NSQ(H)).

Requirement. The Crew Chief will demonstrate his ability to perform primary Crewmember duties utilizing night devices.

Performance Standard. Satisfactorily execute the procedures per NFM, KC-130 TACMAN, TTP (AS REQUIRED), and MAWTS-1 ASP for NSQ.

Prerequisite. Minimum of 5 hours of NVD time under low light conditions and have attended the Night Lab and MAWTS-1 approved ground course. NS-203, NS-204, TACNAV-224, AND TACNAV-225.

RQD-695 2.0 T E KC-130J A NS

Goal. Qualify the Crew Chief in flights involving the utilization of Night Vision Devices in the low altitude regime.(NSQ(L))

Requirement. The Crew Chief will demonstrate his ability to perform primary Crewmember duties utilizing night devices.

Performance Standard. Satisfactorily execute the procedures per NFM, KC-130 TACMAN, TTP (AS REQUIRED), and MAWTS-1 ASP for NSQ.

Prerequisite. RQD-694 and TACNAV-324.

15. Night System Instructor Certification

a. Purpose. NSI Designation for Crew Chief.

b. General. The T&R Program Manual, and the MAWTS-1 Course Catalog define the requirements and training requirements for NSI. The completion of the Core Skill Advanced Phase is a prerequisite. The build-up phase may be administered by a squadron NSI, however a MAWTS KC-130 Instructor shall conduct the certification flight. Upon certification by MAWTS-1, the NSI designation will be assigned by the squadron Commanding Officer.

c. Crew Requirements.

d. Ground/Academic Training.

e. Flight and Simulator Event Training. (1 Event, 2.0 Hours)

RQD-696 2.0 T 1 KC-130J A NS

Goal. NSI Designation.

Requirement. Per MATWS-1 Course Catalog.

Performance Standard. Satisfactorily execute the procedures per NFM, KC-130 TACMAN, and TTP (AS REQUIRED), MAWTS-1 ASP for NSI.

Prerequisite. MAWTS-1 ASP for NSI, RQD-691, RQD-694 and RQD-695 and 30 hours minimum on NVDs 10 of which shall be low light level.

16. Weapons and Tactics Instructor (WTI)

a. Purpose. Certify the KC-130J Crew Chief Instructor as a Weapons and Tactics Instructor capable of safely conducting ground and in-flight instruction in the KC-130J Crewmember Core Skill Advanced and Core Skill Plus flight syllabus as outlined in MCO P3500.15.

b. General. The KC-130 WTI Course is developed by MAWTS-1 and is conducted in conjunction with the WTI Course. Upon graduation, the candidate will be certified by MAWTS-1 as a WTI crewmember. WTI designation can be made by the squadron Commanding Officer

c. Flight Training. As published in the MAWTS-1 Course Catalog.

RQD-697 2.0 T 1 KC-130J A (N) (NS)

Goal. Demonstrate proficiency of the instructional skills required to conduct crewmember tactical training in the Core Skill Advanced and Core Skill Plus stages of training.

Requirement. The WTI candidate will plan, brief, instruct, critique and document a crewmember tactical training event in conjunction with a WTI Major Evolution or Final Exercise (FINEX) sortie. The WTI candidate will complete a minimum of three IUT build-up flights in conjunction with specific and common phases of WTI flight phase prior to the certification flight as listed in the MAWTS-1 Course Catalog.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisites. IAW MAWTS-1 Course Catalog requirements.

17. NATOPS/Assistant NATOPS Instructor

a. Purpose. Qualify the Crew Chief as a NATOPS/Assistant NATOPS Instructor.

b. General. Upon completion of these codes the Crew Chief

c. Crew Requirements.

d. Ground/Academic Training.

e. Flight and Simulator Event Training (2 Events, 6.0 Hours)

RQD-698 2.0 T 1 KC-130J A (N) (NS)

Goal. Assistant NATOPS Instructor designation.

Requirement. The Crew Chief will demonstrate the ability to evaluate a Student Crew Chief in all facets of the duties of a Crew Chief on the KC-130J. The NATOPS Evaluator will conduct a comprehensive evaluation of Assistant NATOPS Instructor with emphasis on standardization and grading criteria.

Performance Standard. Per the NFM and OPNAVINST 3710.7_.

Prerequisite. Core Skill Plus Qualified and 1000 hours.

RQD-699 2.0 T 1 KC-130J A (N) (NS)

Goal. NATOPS Instructor designation.

Requirement. NATOPS Model Manager Evaluator will conduct a comprehensive evaluation of NATOPS Evaluator with emphasis on standardization and grading criteria.

Performance Standard. Per the NFM and OPNAVINST 3710.7_.

Prerequisite. Core Skill Plus Qualified and 1000 hours.

261. T&R MATRICES

CORE SKILL INTRODUCTION PHASE

STAGE	CODE	HRS	REFLT	CRP	SC	R	E	N	NS	
CPL	000	2.0	*	5.0	X					
FAM	001	8.0	*	3.0	X					
FAM	002	8.0	*	3.0	X					
FAM	003	8.0	*	3.0	X					
FAM	004	8.0	*	3.0	X					
FAM	005	8.0	*	3.0	X					
FAM	100	2.0	*	4.0	X	X				
FAM	101	2.0	*	4.0	X	X				
FAM	102	2.0	*	4.0	X	X				
FAM	103	2.0	*	3.0	X	X				
FAM	104	2.0	*	3.5	X					
FAM	105	2.0	*	3.5	X	X				
TACNAV	133	2.0	*	3.0	X					
AR	150	2.0	*	3.5	X	X				
AR	151	2.0	*	3.5	X					
AR	159	2.0	*	5.0	X	X	X			
RGR	170	1.0	*	3.0	X					
TOTAL 100	17	63.0		60.0	13		1			
TOTAL 100	17	63.0		60.0	13		1			

CORE SKILL BASIC PHASE

STAGE	CODE	HRS	REFLT	CRP	SC	R	E	N	NS	REMARKS
NVG	203	2.0	180	1.0	X	X			NS	
NVG	204	2.0	180	1.0	X	X			NS	
CPL	205	2.0	365	1.0	X	X				
ICAO	213	6.0	365	1.0	X	X		(N)	(NS)	
TACNAV	223	2.0	365	1.0	X	X				
TACNAV (HL)	224	2.0	180	1.0	X	X			NS	
TACNAV (LL)	225	2.0	180	1.0	X				NS	
THRX(I)	240	3.0	365	1.0		X		(N)	(NS)	
AR	250	2.0	365	1.0	X			(N)	(NS)	
AR	251	2.0	180	1.0	X	X		(N)	(NS)	
ALZ	260	2.0	365	1.0	X	X				
ALZ	261	2.0	180	1.0	X				NS	
ALZ	263	2.0	180	1.0	X	X		(N)	(NS)	
RGR	270	1.0	365	1.0	X	X				
RGR	271	1.0	365	1.0				N	(NS)	
TOTAL 200	15	33.0		15.0	9	11	0	9(3)	9(3)	
TOTAL 100, 200	32	96.0		75	22	11	1	9(3)	9(3)	

CORE SKILL ADVANCED PHASE

STAGE	CODE	HRS	REFLT	CRP	SC	R	E	N	NS	
TACNAV	323	2.0	180	5.0	X	X				
TACNAV	324	2.0	180	5.0	X	X			NS	
THRX(R)	340	3.0	365	5.0	X	X	X	(N)	(NS)	
RGR	370	1.0	365	2.0						
RGR	371	1.0	365	2.0	X	X	X		NS	
AD	380	1.0	365	1.0	X	X		(N)	(NS)	
TOTAL 300	6	10.0		20.0	4	4	2	4(2)	4(3)	
TOTAL 100, 200, 300	38	106.0		95.0	28	15	3	13(5)	13(5)	

CORE SKILL PLUS PHASE

STAGE	CODE	HRS	REFLT	CRP	SC	R	E	N	NS	
DEFTAC	440	1.0	365	2.5	X	X			(NS)	
DEFTAC	441	1.0	365	2.5	X				(NS)	
TOTAL 400	2	2.0		5.0	1	1	0	2(2)	2(2)	
TOTAL 100, 200, 300, 400	41	108.0		100.0	29	16	3	15(7)	15(7)	

DESIGNATION TRAINING PHASE

STAGE	CODE	HRS	SC	R	E	
IUT	501	3.0	X		X	
IUT	502	3.0	x		X	
IUT	503	4.0	X		X	
TOTAL 500	3	10.0	3		3	
TOTAL 100, 200, 300, 400, 500	44	118.0	27	16	6	

REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS

STAGE	CODE	HRS	SC	R	E	N	NS	ADMIN
RQD	600	4.0				(N)		
RQD	601	4.0	X					
RQD	602	4.0	X					
RQD	603	4.0	X					
RQD	604	4.0	X					
RQD	605	4.0	X					
RQD	606	4.0	X					
RQD	607	4.0	X					
RQD	608	4.0	X					
RQD	609	4.0	X					
RQD	610	4.0	X		X			
RQD	611	1.0	X					
RQD	612	1.0	X		X			
RQD	616	2.0	X			(N)	(NS)	
RQD	650		X				NS	
RQD	651		X				NS	
RQD	661		X				NS	
RQD	670		X					
RQD	671		X				NS	
RQD	680	4.0						
RQD	690	4.0	X		X	(N)		REFLY 365
RQD	691	4.0	X		X	(N)	(NS)	REFLY 365
RQD	692	4.0	X		X	(N)	(NS)	REFLY 365
RQD	693	4.0			X	(N)	(NS)	
RQD	694	2.0			X	N	NS	
RQD	695	2.0			X		NS	
RQD	696	2.0					NS	
RQD	697	2.0				(N)	(NS)	
RQD	698	2.0				(N)	(NS)	
RQD	699	2.0				(N)	(NS)	
TOTAL 600	30	68	15		8	12(8)	12(8)	
TOTAL 100, 200, 300, 400, 500, 600	74	186.0	47	16	14	27(15)	27(15)	

262. T&R CHAINING TABLE. Event chaining allows for the completion of more complex and/or advanced events using the same skills to update proficiency status of events. Only events in a sequence entailing demonstration of equivalent skills shall be chained.

a. When a T&R event is logged, the proficiency dates of other T&R events (usually lower in number) may be updated. The T&R code that is logged is known as the “chaining code,” and the updated codes are “chained codes.” Chained codes are not always updated when a chaining code is logged.

b. Conditional Chaining. The following environmental conditions further specify which T&R codes are chain-updated.

(1) Night Optional. Chained codes annotated with parentheses around them, e.g. (200), are only chain-updated if the chaining code is flown at night.

(2) Night Systems Optional. Chained codes annotated with parentheses and NS after them, e.g. (200 NS), are only chain-updated if the chaining code is flown using night systems.

(3) Light Level Optional. Chained codes annotated with parentheses and HLL after them, e.g. (200 HLL), are only chain-updated if the chaining code is flown using night systems during a high light level period. Chained codes annotated with parentheses and LLL after them, e.g. (200 LLL), are only chain-updated if the chaining code is flown using night systems during a low light level period.

CREW CHIEF FLIGHT CHAINING

FLIGHT	FLIGHT UPDATED
203	
204	203
205	
213	
223	
224	(203 HLL),223
225	(203 HLL),(204 LLL),223,(224)
240	(203 HLL),(204 LLL),223,(224)
250	
251	(203 HLL),(204 LLL) 250
260	
261	(203 HLL),(204 LLL),260
263	(203 HLL),(204 LLL),260
270	
271	(203 HLL),(204 LLL),270
323	223
324	(203 LLL),(204 LLL),223,224,323
340	(203 HLL),(204 LLL),(224),(324),223,323
370	
371	(203 HLL),(204 LLL)
380	(203 HLL),(204 LLL)
440	(203 HLL),(204 LLL),224,223,240,323,(324),340
441	(203 HLL),(204 LLL),224,(324),223,240,323,340,440
600	
616	
654	
661	
670	
671	
680	
690	
691	690
692	690,691
693	
695	
696	
697	
698	
699	